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## ORIGINAL LECTURES.

### LOCOMOTOR ATAXIA.

*A Course of Three Lectures delivered before the Cincinnati Medical Society,*


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*LECTURE II.*

PATHOLOGY.

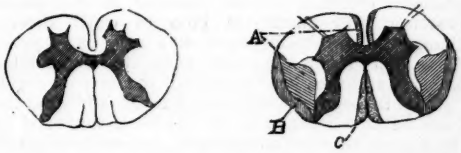
GENTLEMEN: In considering the pathology of this disease, we will have to speak of both the locality and nature of the pathological changes, and in how far the latter enable us to explain the symptoms presented. In order the more intelligibly to approach this subject, permit me first to speak briefly of our present knowledge of the functions of the spinal cord. Notwithstanding great advances of late years, that knowledge is still extremely meagre. For in the way of anatomical, experimental, and pathological researches, through which this knowledge is acquired, there are great and serious obstacles. The anatomist can trace the nerve-roots, whose functions are known, such a short distance into the cord as not thereby to determine the function of any of its integral parts. The physiologist by his experimental studies has been enabled to determine, with a considerable degree of certainty, that parts of the anterior columns convey motor impulses. But as to the posterior columns he has come to far less definite results. Schiff concludes, from his experiments, that the posterior white columns convey tactile sensations, that the posterior gray matter conveys sensations of pain. But herein he is not upheld by all physiologists. Ludwig and Woroschiloff, from recent experiments, have concluded that the lateral columns also contain sensory fibres, but their experiments were made on rabbits, and their results cannot, without further consideration, be accepted as true for man.

Our knowledge of the cord has recently been greatly advanced by the investigations of Flechsig; his results were obtained from a study of the development of the cord. He observed that some nerve-fibres become enveloped with their medullary sheaths earlier than others, the two being easily distinguished by their color; the one white, the other more translucent or colorless. He was thus enabled to determine that whole strands of nerve-fibres became medullated at different periods; some in the early months of fœtal life, others being not yet completely medullated at birth. From this, as well as some other considerations, he concluded that the cord was composed of a number of different nerve-bundles which were anatomically and functionally distinct; these different nerve-strands he terms systems. Those which are earliest medullated, appear to contain only short fibres, either short continuations of the spinal roots or fibres connecting one part of the cord with the other; those medullated latest appear to contain long fibres which connect the cord with higher intracranial centres.

On one of the accompanying figures I wish to point out these several systems. On the first figure is merely represented the usual appearance of a section of the cord. Between the anterior fissure and the posterior roots are the antero-lateral columns; between the posterior fissures and roots, the posterior column divided by a slight sulcus (in the cervical region) into the external or Burdach's column, and the internal or column of Goll. On the second figure are delineated, in a diagrammatic manner, the systems of Flechsig. Those remaining white are the various systems containing short fibres. The darkened ones contain long fibres, and are respectively the pyramidal tracts connecting the central convolutions in the brain with the muscles; the cerebellar strands connecting, probably, Clarke's column in the cord with the cerebellum; and Goll's column, of which we will speak again.

These results of Flechsig are largely corroborated by the studies of secondary degenerations. It is well known that when nerve-fibres are cut off from their trophic centres, they will degenerate throughout their whole peripheral extent. Thus, after lesions of the internal capsules, the pyramidal tract will degenerate throughout its whole extent in the cord. After section of the cord, experimental or otherwise, the systems containing short fibres degenerate for a short distance above and below the seat of section. But we wish here to speak of secondary degenerations of the posterior

FIG. 1, FIG. 2.




*A.* Pyramidal tract. *B,* Cerebellar fasciculus. *C.* Column of Goll.

columns, and this for two reasons; because these columns especially interest us in our studies to-day, and because Flechsig, in his researches, was enabled to throw less light upon this part than upon other portions of the cord; only finding Goll's column with distinctness in the upper parts of the cord. After disease of the cauda equina, secondary degeneration has been observed in the lumbar region, involving the greater part of the posterior column, while in the dorsal and cervical regions it is limited to Goll's column. This secondary degeneration can be traced as far as the medulla. Singer has experimentally evoked the same changes through section of the posterior roots of the sacral and lumbar nerves. These observations lead us to conclude that fibres of the posterior roots, after penetrating the gray matter of the cord, pass upward in Goll's column as far as the medulla oblongata. Lesions of higher portions of the cord of the dorsal and cervical portions, as well as some recent experiments of Kahler, inform us that the posterior root-fibres in these parts also ascend in Goll's column, but are contained in the more external and anterior part of that column. These facts are illustrated on this plate (presented to the Society), on which are represented the sections at various levels of the cord, in five cases of secondary degeneration reported by Schulze. In three of these the primary lesion was in the lower; in two, in the upper portion of the cord.

These various studies, those of Flechsig on the development of the cord, and those of secondary degenerations, enable us to map out separate nerve-strands

which are, at least in a degree, anatomically and functionally distinct. And now let us ask, do pathological processes ever attack and limit themselves to one or more of these systems? They do; and such are termed systematic diseases. Thus, amyotrophic lateral sclerosis attacks the lateral columns and, their probable terminations, the ganglion cells of the anterior cornua, and causes paralysis and atrophy of muscles. We will not mention other systematic diseases which have been more or less definitely determined, but ask—Is or is not locomotor ataxia a systematic disease? Is it a diffuse myelitis which only accidentally limits itself to the posterior columns, or does it primarily attack and limit itself to certain bundles of nerve-fibres, which are anatomically and functionally distinct? Before attempting to answer this question, let me first briefly state what are the pathological changes in this disease. We find what is usually termed gray degeneration. On section of the cord at an early period of the disease, the diseased areas are observed to be of a gray or grayish-red color, thus contrasting with the normal white tissue. Often the changes cannot be observed on the fresh section, but are easily brought out after hardening in chromic acid preparations. At a later period there may be complete atrophy and shrinking of the diseased parts. The microscope reveals, at an early period, an increase of the neuroglia, granular cells, enlarged Deiter's cells, etc., and swelling or atrophy of some of the nerve-fibres, both axis-cylinders and medullary sheaths. At a later period the neuroglia is converted into a fine, wavy, dense connective tissue, and the nerve-fibres have largely disappeared.

As to the locality of these changes. They are in the posterior columns, in the posterior nerve-roots and posterior gray matter, in both of which diseased changes are probably found at a very early period. At a later period they may even attack the lateral columns and the ganglion cells of the anterior cornua.

What is the origin of these changes, and what their more exact localization? It has been supposed that the disease begins as a meningitis, and only secondarily affects the cord. This theory was based on the fact that in advanced cases thickening and degeneration of the pia mater in the posterior portion is almost always observed. But, as in several cases in which the cord could be examined at an early period of the disease no meningitis was found, this origin cannot be accepted. The changes in the meninges are probably secondary to those in the cord.

Let us study the more exact localization of the disease in the posterior white columns. A number of cases have been reported in which the diseased changes of an early period were very carefully examined. I know of only four such cases, one of Pierret, one of Westphal, and two of Strumpell, in each of them the patient dying of some other disease while the locomotor ataxia was still in its early stages. In each of them the disease was most marked in the lumbar region, where it appears to have had its origin. It was here limited to a portion of Burdach's column. In higher parts of the cord the disease of Burdach's column was less extensive, while in the highest part it limited itself to the column of Goll. I here present you the plates representing the disease on different sections of the cord in the cases of Pierret and Strumpell. I present you also a number of plates (nine cases of Strumpell's), representing the disease at a more advanced period. If you will carefully study these plates, you will observe that certain parts of the posterior columns are always attacked, that other parts are almost as universally spared; for instance, in the lumbar region the most anterior parts of the posterior columns, in the cervical region the most external posterior portion, are always spared. In these two anatomical sections, which I present to you, the one from the lumbar, the other from the cervical region, you will again see that about the same parts are spared. You will also observe that both in these anatomical sections, as well as in all the plates presented, there is an almost exact symmetry of the disease on the two sides. These facts, the symmetry of the disease, its beginning in certain parts, its attacking certain parts and sparing others, cannot be explained by a diffuse myelitis, and are sufficient, I believe, to prove that we have to do with a systematic disease. But it is more difficult to define the system or systems attacked. The most easy and natural explanation is, that the disease begins in the posterior root zones, in that part of Burdach's columns where fibres from the posterior roots penetrate the gray matter, possibly attacking at the same time the nerve-fibres in this part, and their continuation in the roots and in the gray matter. It begins, then, in this posterior root zone as a primary disease, perhaps first in lumbar, later in dorsal and cervical regions. And from this primary source the disease extends inwards and upwards; inwards to the gray matter, and even in those rare cases where the ganglion cells of the anterior cornuæ are involved, Charcot believes that it is through an extension of the disease along some fibres of the posterior roots. Possibly the disease in the lateral columns is also to be thus explained. Upwards the disease extends into Goll's column, thus reaching to the medulla.

While this seems the easiest explanation, it is not universally accepted. Strumpell believes that we have to do with a combined systematic disease, and that both Burdach's and Goll's columns, are each primarily affected. It must be acknowledged that we know too little concerning primary or secondary degenerations to be able to distinguish them from one another by mere appearances. Then we must remember a surmise of Westphal, that the posterior column is composed of a number of different systems, and perhaps one after another of them is attacked in this disease.

Another question we must consider is, What is the nature of the disease? Is it an interstitial or a parenchymatous myelitis, or is it primarily merely a degeneration of the nervous elements? We have seen that both the neuroglia and the nerve-fibres are affected, and the mere appearance does not enable us to determine in which the changes were primary. But if we have to do with a systematic disease, this can only be accounted for by a primary disease of the nerve-fibres. But whether this primary disease be an inflammation or a degeneration, our present knowledge does not enable us to determine.

And now we approach the second part of our subject, how far we can explain the symptoms by the pathological changes. What we have already said of our knowledge of the functions of the cord will lead you to infer that such explanations will be largely conjectural. Charcot explains the main symptoms in this way. The disease, when limited to a part of Burdach's column, produces the lightning pains; when it extends to the posterior cornua and roots, it produces ataxia; when it involves the gray matter and posterior roots, it produces marked anæsthesia. This explanation, plausible as it appears, is largely arbitrary. And it may be more nearly correct to attribute the symptoms at these various periods rather to the intensity than the exact locality of the diseased areas. While the disease is very limited those nerve-fibres are only irritated which, when the disease becomes more extensive, are now destroyed.

We may in a general way state that the pains, parasthesias, etc., are due to irritation, the anæsthesia to destruction of fibres of the posterior roots, either in the roots or in some part of the cord. Paralysis is due to

involvement of the lateral columns, muscular atrophy to disease of ganglion-celis in the anterior cornua. As to the explanation of the symptoms on the part of genital functions, bladder, rectum, or of the trophic changes we are still entirely in the dark.

Most interest has been taken in the explanation of the prominent symptom, the ataxia, and concerning this various theories have been promulgated. One is that it is due to disturbances of the reflexes, and therefore to a loss of control on the part of the cord. Another is that on account of the impairment of sensation, cutaneous, muscular, etc., centripetal impressions from the periphery to the coördinating centres in the brain are not properly received, and therefore the guiding influence of the latter imperfect. In other words, on account of deficient knowledge of the limbs there is a loss of the power of controlling them. According to a third theory, there are in the cord, in addition to the fibres conveying the motor impulses, another set of fibres from the coördinating centres, which serve to regulate muscular actions, and these coördinating fibres are destroyed in this disease.

I do not wish to give the various arguments for or against these various theories. Each is far from being established, and there are serious objections to all. But it seems to me, rather than supposing a special set of motor fibres in addition to those which convey motor impulses, far easier to believe that there is a loss of control from peripheral sources, either on the part of the cord through impairment of the reflexes, or on the part of the coördinating centres through impairment of conscious sensations, or from both causes at the same time.

As to the involvement of the cranial nerves, the amaurosis, ocular paralysis, etc., we can give no definite explanation. No anatomical connection has been found between these nerves and the disease in the cord, and probably none exists. We can more easily believe that there is some general condition which at the same time predisposes certain parts of the cord and certain cranial nerves to disease.

For one symptom we can give a more definite explanation, that is the absence of the patellar tendon-reflex. Westphal has long supposed that this was due to disease of the posterior columns in the lumbar region. He was recently enabled to carefully examine the cord in a case where the disease was at such an early stage that no other symptom but the absence of the patellar tendon-reflex was apparent, and he here found the pathological changes limited to a portion of Burdach's column and most marked in the lumbar region. In the two cases of Strumpell's already mentioned, the disease was also in its early stage, there was an absence of the patellar tendon-reflex, and pathological changes were found in the same part of the cord. And now we know why this is usually the first symptom of locomotor ataxia, because the pathological changes usually begin in that part of the cord which produces it.

## ORIGINAL ARTICLES.

### NEW ENGLAND MALARIA—FROM WHENCE?

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THE occurrence of malaria in certain parts of the United States more frequently than heretofore, and in some sections not constantly disturbed thereby, has given rise to some hypotheses as to causation which invite and deserve the careful analysis of every student of etiology. Whenever we are called upon to deal with a dyscrasia in which it is admitted that the morbific principle is unknown, there is great temptation to that excursus of scientific imagination, to which even scientists are sometimes prone. Like most beguiling infatuations the scholar is lured in a most inquisitive and intoxicating way into the arbor of his delightful reverie, until the very enchantment of his myth leads him to cajole himself with the idea that he is still in the region of facts, and has arrived in his delectable land by a new road surveyed with the exactest care, and laid out in accord with the precise rules of a logical analysis.

One need only to turn from some of these new and modern views to the records of the authors and practitioners who have for a century been dealing with malaria, to see how the minority hypotheses of the past are reproduced in the present.

We are first informed that there are many marshes and lowlands rich in vegetable decay in which malaria has never been known to prevail. If this were a new fact, it might have some influence in modifying a belief in the paludal relations of malaria.

But this fact is no more prominent now than it has been during the whole period in which this disease has in many countries, and under diverse circumstances, been subjected to the most careful judgment and experience of the medical profession. Malaria, says Bartholow, is called "marsh miasm," because of the abundance of this poison about marshes. But not all marshes produce malaria. The "Dismal Swamp," for example, is free from marsh miasm, "although apparently well adapted to produce it."

It is because nearly all observers and authors have all along been able to admit this, and yet maintain the view of the connection of marshes with malaria that we have one of the best historical evidences of the correctness of this view. Having given full weight to all these facts, experience has yet confirmed a verdict as to this marsh relationship.

Another statement, of which again so much is made as to give it an air of novelty, and so a force against an old truth, is that malaria occurs on the hilltops as well as in the valleys.

Score upon score of such facts were also in possession of our medical fathers and ourselves, and were given due consideration in making up the judgment of historical experience (see *Dictionary of Medicine*, Quain, 1882, article Malaria).

So long as the doctrine of the diffusion of gases or the fact of prevalence of winds lasts, so long will it occur that particles of disease will be wafted; that by proximity or varying direction of winds or changes introduced by the removal of forests, the cutting of channels, the changes of seasons and of temperature, and the greater travel of the people of the hills to the valleys, there will be the increase of occurrences which have been well understood and accounted for before this, and of which the vacillating increase is equally susceptible of explanation.

It was long ago found that changes made by man high up in the hills gave rise to some of the same

conditions once confined to the valleys; that artificial channels of conveyance have been made from sources near at hand; that the malarial zone is moved above some old isothermal line not by the change of latitude, but by a change of temperature and of vegetation which is equivalent thereto, and so the apparent advance has been a coming down of the hills to the conditions of the valleys, rather than a change in the conditions of malarial distribution. The same is true of the next leading statement, viz., that malaria is found to prevail in latitudes where it was once unknown.

It is intensely interesting to turn back to the authorities of the last fifty years, and find whole pages of close statement, which show how well these and similar facts have been considered and given their due weight and proper explanation. The sustained view was held not because they were not cognizant of these facts; not because they had settled to a belief which nothing could shake, but because the opinions entertained accounted for the largest number of facts and were not nullified by explicable variations.

Indeed, the tendency to deny the influence of any local cause, for any disease on the part of the resident community, is one as old as the days of Hippocrates, and could never have been expected to be overlooked by a certain inventive race to the north of Mason's and Dixon's line.

The only really new thing which has given an impetus to the hypothesis as to the migratory or portable character of malaria is that which relates to the cryptogamic origin or particulate entity of many diseases. As soon as the view fairly took shape that even such a disease as this depended on a specific plant-life, so soon it was an easy generalization that all marshes do not produce the same forms of plant-life; that some might not happen to have the special one that causes malaria, and that in places where it did occur you must not merely prove a marsh, stagnant water, abnormal decay and heat, and a rising miasm, but you must also show that this particular marsh has this particular plant. Hence, it is probable that, for a score or more of years, yellow fever, typhoid fever, typhus fever, diphtheria, and several other diseases, whenever occurring in a foul locality, will be insisted upon by a very respectable minority as not being in any way connected with local conditions, but as having arrived from somewhere else. In certain rare instances it will be true; in certain other instances they will arrive through channels provided by the locality; in most, they will depend for their virulence and for their continuance on the pabulum of local conditions. In all such, if not before native, they will become so, because they find all the conditions they found in their own habitats. Oftener they will find themselves among their own species of plant-life, and that they have but added to the intensity of the malaria-breeding atmosphere. Just as it may be true of some very common marsh-plant that it may not be found in some particular locality where you would expect to find it, it is equally true that you are almost certain to find it indigenous there; but if you do not, it is very sure to become so. Also, that if you would be rid of it, your expectation of riddance and relief is far better in changing the adaptation of soil and locality thereto than in trusting to its not getting in from an adjacent township or State.

The prominent argument that has been more recently put forth in favor of the independence of malaria of local and paludal conditions, is that malaria has appeared in places where it was unknown; that it seems to have cycles of appearance, and to be intermittent in its continuance. Also, it is claimed that its steady progress can be traced as by a moving wave, one year after another reaching places in succession, and so showing a foreign origin.

The appearance in places before unknown is so easily accounted for by the changed conditions of locality, of forest and soil, of excavation and infilling, of rain-fall and water-courses, of climate—and especially temperature—of moisture and winds, of neglect or cultivation, of immigration and increase of travel and population, that these seem quite adequate to explain many of the asserted facts.

The intermittency of prevalence very readily impresses some minds, since it is very natural to reason that causes constant in operation will have a constancy of result. But when we come to know that malaria is greatly related to changing conditions of season; that the conditions of low lands are constantly being modified by the height of the level of soil-water, and by its varying alteration in different seasons; that plant-life varies much in exuberance from season to season, and that a few days of excessive temperature or dryness may be the deciding point, it is not wonderful that there is not more uniformity of result, and that the varying seasons and conditions do not register the same number of cases. We have seen an instance in which for years there has seemed no prominent result from alluvial deposits and interrupted water-courses, in which, owing to the killing of vegetation by peculiar midsummer heat and drought, nine-tenths of the people of a population of three thousand have been seized with various forms of malarial disease, and where the demonstration was too palpable and too stultifying to permit the hypothesis of invasion.

I have lived and practised in a district where bilious fever prevailed extensively in the year 1828. Gradually there came to be a cessation of periodic fevers. I had practised for twenty years in that locality, scarcely seeing a case of intermittent but for a single year, and yet twice in the last ten years seeing seasons of great prevalence of the disease.

I can point to an inland town where malaria was never known until some six or eight years since, but where it now prevails extensively from year to year, and yet it has never occurred to account for it by invasion. How it *invades* is well described by Dr. Chapin, of Providence, Rhode Island, in the Fourth Report of the Rhode Island State Board of Health, 1881, pp. 223 and 224, where it is shown how local causes have accumulated in many places once exempt, and how a marsh which has long existed has become stagnant or fever-producing by more recent changes and climatic variations. Also by Dr. Snow,

as quoted in Sixth Report of the New Jersey State Board of Health, pp. 12, 13.

To most observers the yearly conditions had been the same until closer investigation of course and changes had been made. The hypothesis of the progressive travel of malaria has been so pressed into prominence that this deserves a careful study. This cannot be better reached than by an examination of the field in which it has been especially claimed to be illustrated.

The term Yankee has very properly ceased to be a term of reproach, and become one significant of high inventive genius and ready wit. It has never been more aptly and acutely displayed than in the energy and sophistry with which it is attempted to show that Connecticut has been invaded by malaria from New Jersey, and places to the south and west. Plausible explanations have been sought, and deductions made on an insufficient number of data, so that very clever physicians have kept watch while week by week and year by year it has come from the salt meadows of New Jersey and the dark jungles of New York, reached the pure and elevated shore of the Sound; the non-miasmatic highlands along the lofty banks of the Connecticut River; the sparkling, dashing water of the straight-running, unalluvial, roaring Housatonic, and actually insinuated itself amid the mountain fastnesses of Milk Street, and the Springfield tablelands.

We readily admit that to this there has been great temptation. There were enough loose facts from which to frame a hypothesis, and the sharp interests of manufacturers made it very easy to be self-deceived.

It would never do to admit that the busy mills and manufacturies were producing malaria as well as merchantable fabrics. It is in evidence that almost every quarter of a century, since mills began to run in New England, has been signalized by some important lawsuit in which the most recent and plausible hypothesis has been made available to shift the etiology of malaria. As we now have the doctrine of germ portability, it is easy to assume that all evils come from afar, and to construct an artificial wave-chart out of a few facts and abundant evolution of inner desire. While we cannot doubt the honesty of these hypothetical inventors, we do not find that the facts are presented in such way or with sufficient data to command assent.

While it is no doubt true, as it has been true in other States, that the disease is not equally prevalent at all times; that it appears often in a place north or south, or east or west, of another before it appears in that place; it is also true that there may be causes not remote in distance or in time to account for this.

We do not claim that there are no mysteries attending malaria, but they are such as obtain as to many other diseases. John Simon did not do despite either to pathology or to experience when he spoke of a whole class of diseases as filth diseases. Yet he would in very many cases be totally unable to define the exactness of relationship, and might be bothered now or then by the statements of many a one as to a place in which, notwithstanding the apparent conditions, no form of filth disease had occurred. Neither a cessation nor sudden recurrence of malaria should confound the great class of witnesses who recognize a connection between enforced conditions of vegetable decay amid moisture and heat as having a causal and prolific relation to periodic fevers.

These may be transferred from place to place, over a larger expanse of territory than once conceived, since more rapid transit may occur to things as well as men. There may continue to be in the future, as in the past, swamp conditions in which undisturbed nature has so harmonized and adjusted relations that the very growth and decay are conservative of health.

But this does not set aside the fact that the habitat of malaria is still just where it has been supposed to be, and that the only radical remedy, therefore, is to preserve the water-courses, or compensate for the disturbance; to study and regulate the soils and water by proper and efficient drainage; not to make great changes by the felling of forests, the blocking-up of streams, the construction of roads, or the methods of artificial vegetation, without recognizing that such disturbances must have adjustments, or else the disturbed equilibrium will tell on the health of the vicinity.

Let us now examine into the alleged invasion of New England by malaria. We need not refer at length to the evidence that malaria showed itself in early days native and to the manor born, and earlier than in any other known localities in America.

The monograph of Dr. Oliver Wendell Holmes, published in 1846, is so full in its detail, and so accurate in its historical references, as scarcely to need additional testimony.

The sanitary report as to epidemics in Massachusetts, made in 1850 by the commissioners appointed relative to a sanitary survey of the State, refers to various outbreaks, and gives some details. We trace it along at such connected intervals as 1634, 1647, 1655, 1658, 1668, and as recognized as indigenous to Connecticut in 1671 and 1678. In 1683 it was at Cambridge and Salem. (See *Boston Med. and Surg. Journal*, Jan. 26, 1853.) The summary of Dr. Bronson gives evidence of its endemicity at Fairfield, Norwalk, and other points, so, as he says, "*there is good reason to believe that the towns along the Sound were affected during the seventeenth century.*" It is to be remembered, too, that just at the last half of the seventeenth century, settlers were constantly arriving in New Amsterdam, and the Dutch and English and Scotch were emigrating to New Jersey, without any signs of it there. It had not as yet settled down from New England upon Long Island, New York, or New Jersey. Indeed it is quite probable that Gov. Cartaret owed much of his success in promoting emigration from New England to New Jersey to the greater healthfulness of the latter, and because the people were seeking riddance from the local periodic fevers which had not been prevalent with the early settlers in the Middle States.

For a time, at the beginning of the eighteenth century, we do not hear so much of the disease,

because the smallpox came into such prominence, and probably because malaria had become so indigenous as not to excite so much attention. Yet we hear of it in 1725 as so serious as to give rise to a litigation lasting until 1730, when the dam on Bantam River, near Litchfield, was removed. In 1750 the Bethlehem epidemic followed the draining of the pond. We have frequent references to sickly seasons from 1740 to 1760, in which there is good reason to believe that the fevers were of this type. Thus, in connection with the terrible Pepperell fever of 1755, Butler's *History of Groton* says: "The cause of the Pepperell fever was thought to be the miasma arising from decayed vegetable matter. The swamp or meadow of John Shattuck, near Henry Jewett's, had been overgrown with bushes and various vegetables; and in order to kill them, and bring the land into a state of cultivation, a dam was built, and the swamp overflowed with water. When the water had been drawn, and the vegetable-matter exposed to a summer's sun, the stench was very offensive, and extended for several miles around" (see Shattuck, p. 68).

We have no map showing by what lines this great sickness advanced from New Jersey and New York until it struck Pepperell swamp in 1755.

From 1764 to 1780 we are told that there were many years of sickness, but we have few facts preserved to show its extent. The famous suit as to New Milford in 1799, however, is valuable as bringing out the fact that for long years before, and so often and in so many places, malaria had occurred at intervals for a half-century, as not to satisfy the jury that this one mill-dam was the cause. Places are named and particulars given. The excellent summary of Dr. Chamberlain, in the fourth report of the Connecticut Board of Health, pp. 142–147, commencing, "On the other hand," . . . and ending with the sentence, "These items are only given to aid in proving malarial diseases to have been permanently endemic in the region in question, which also includes portions of Litchfield County," would of itself be enough to show the prevalence of malarial fever with as great constancy through the period up to 1860 as is common in those States in which malaria has been claimed as so endemic as to be a source of it. The description by Dr. John Warren of the Boston and Sheffield fevers of 1796 shows that a very great portion of those taken sick were situated near extensive flats, and that Hubbard's Pond and the repeated Sheffield fever were associated (see Shattuck, pp. 71 and 72). But, besides this, we find that all Connecticut and the westerly part of Massachusetts, about the year 1800, were busily discussing—as they are now—"whether overflowing lands for mill-ponds or other purposes generated a malaria which was unfavorable to health" (see Shattuck, *Sanitary Report*, 1850, p. 73). Indeed, if any one should start the hypothesis that Massachusetts and Connecticut were the original habitats and breeding-places of malaria for the United States, and that by winds and by New England emigration the disease had reached adjacent States, he would need no better description than is to be found in the *Memoirs of the Connecticut Academy of Arts and Sciences*, vol. i. p. 131, being the account given by the Hon. David Daggett of the Ruggles trial (January, 1800), in the court of Litchfield County, Connecticut. It related to a mill-dam which had long caused malarial fevers. Saulsbury, Colebrook, Roxbury, Kent, Great Barrington, West Stockbridge, and most of the towns of the Housatonic, were then, or before, named as habitats of the fever, while it had always, as far as runneth the memory of man, been the disease of New Milford. Already the interests of capital had begun to oppose the theory of its relation to overflowed lands, since many a New Englander was looking for a mill-site. It is no doubt true that, after the great prevalence of malaria in Connecticut and Massachusetts for several years, about up to 1805, there was not so epidemic a prevalence of it, and other diseases seem to have been more general. Yet from the records of medical societies, of courts, and of medical men, there seems to have been just about the same prevalence as in the Middle States. Thus, we notice that in 1822 reporters for the different counties in the State of New Jersey speak of a prevalence of "intermittents" *after an exemption* of twenty years.

In 1835, a circular was extensively distributed in Massachusetts, inquiring into the history of intermittent fevers. Dr. Bowditch, in his *Hygiene in America* (1877), says: "In reference to Massachusetts, I will report that there is no evidence of any disease generally distributed over the State, having ceased to exist. . . . It is admitted, however, that intermittent fever *formerly* prevailed in certain localities where now it is not known. This is due undoubtedly to the cultivation and drainage of the soil." This accords with the statement of Bartholow, in his *Practice of Medicine*, that "the telluric and other conditions favorable to the development of malaria exist largely in this country along the Atlantic seaboard as far north as Boston." It had the same history of prevalence and absence from 1750 to 1850 that is recorded of numberless localities.

Where the population had become fully acclimated, and there was little or no immigration, and little change of vegetation, of forests, of watercourses, and no upheavals or excavations, there was, no doubt, notable absence of the disease. On the other hand, the lines of new population, of improvement, and those where mill-dams and other changes were made in due time recorded the effect during a period somewhat limited by the shortness of the warm season. The Housatonic kept well up with the Delaware and Long Island Sound. The Connecticut River was more prolific in chills than the Hudson River, near New York City (see description of the Housatonic in Holmes' "Prize Essay"). It would be well for those who dispute the effect of local causes in high latitudes to read the report of the Board of Health of Ontario, Canada, on "The Malaria Epidemics of 1882 in Coboconk and Madoc" (see Annual Report of Provincial Board of Health, Ontario, 1882). Its facts are most significant and illustrative as to how malaria may originate even in New England.

So far as we understand the views of those who would discredit the paludal hypothesis and adopt the wave or migratory view, the present malarial wave began its surging about the year 1860, although it was not until 1865, or about the period of the return of thousands of troops from the war, and great interchanges in the internal life of New England, that, to use the words of another, "Each year saw new territory invaded" (see Chamberlain, p. 144).

A paper in the last Report of the State Board of Health of Connecticut (1882), pp. 205–211, is accompanied by a map to show the extent and direction of the annual progress of "the present malarial epidemic during the past twenty-three years." The map is based upon a classification which differs from that of the same report the year before in *fifty or more names of localities or years of occurrence*. In the former year, the Secretary of the State Board of Health of Connecticut had so interpreted his statistics as to have concluded that, "*although not endemic generally in Connecticut, intermittent fever was present in some part of the State, saving the western and southern, nearly if not quite every year since colonial times.*" That is true, and if one cares to study even these records and others in our knowledge, it will be found that the southern part of Connecticut must nearly have touched the Massachusetts line, and the western part extended quite east of the Connecticut River, and that its lesser prevalence in Eastern Connecticut is to be accounted for without resort to the second author's hypothesis of "successive waves, and later by the concentric lines of its annual progress," which, the author says, indicates an advance in one definite direction independent of any known or recognized influence, whether atmospheric, telluric, magnetic, or climatic. To find out how dependent on some of these it had been, he needed only to have turned to the paper of Gen. Veilé, in the former report of the Board, in which he accurately states a sufficient number of facts as to many of these localities, and also as to causes of its occurrence and progression because of changes made. From page 228 onward, there are some very exact statements as to the obstruction of whole lines of water-courses by railroads, and of changes in inland and higher towns, which do much towards explaining the advance both in territory and in prevalence.

We thus find that local causes had accumulated all along the Connecticut shore of Long Island Sound, and penetrated as really and as progressively up the rivers and into the hills as malaria had done.

The author, after a series of statistics so incomplete as to be misleading, projects an original map to show the ærial and telluric significance of this wave hypothesis; how by successive gyrations it has lighted from afar on the hitherto unsmitten New Milford, the cleanly North Adams, and actually affected the valley of the Housatonic.

The map of Paris which Mark Twain constructed for the diversion of strangers, and which had numerous certificates as to its boldness of conception and originality of design, may be profitably studied side by side with this excursus, which is fortified by graphic and linear delineation of the most vagrant character. Then the author, without giving the names of observers or their own statements, and with but one and a half pages of comment not based on any complete analysis of statistics, proceeds to say "*that we may be sure that ague is not produced by heat, moisture, or decay arising from ponds, reservoirs*, swamps, or low ground overflowed by freshets, or exposed by evaporation," however handy the hypothesis may be for the (p. 206) daily use of "talkative laymen and lazy physicians." The author seems all along to have forgotten (p. 207) what had occurred all this time along the southern border of Massachusetts.

The article on mill-dams and other water obstructions in the Report of the Massachusetts Board of Health for 1872 has many local facts that do not look like a foreign invasion.[1]

While it is quite true of towns in Connecticut, as everywhere else, that we do not quite see always why one town has more intermittent than another, why some regions are comparatively exempt, yet we do see that malarial fever in Connecticut and Massachusetts is no new thing. We think many other localities can, in a general way, trace lines of direction, as when it prevails in one place, and favoring winds transmit it to another before a local condition has caused it. But from any evidence before us, we fail to see that there has been an "invasion" of successive waves, "north-east by north," slightly curving to the left, "for fifteen years, then a lateral radiation; that it first touched shore on Long Island Sound in two places, with a third invading point at Milford." *New Milford*, we are told in the one report, was reached in 1876, and by the other in 1877, whereas the disease had been indigenous in both places far back, although not being found each year. Dr. Knight, of New Haven, declared it *never altogether* disappeared from the lower Housatonic, and that it was sporadic as far up as Northampton.

Yet notwithstanding these and scores of other facts, this map projects its contour lines; seeks to make them all converge to its hypothesis, and reaches its climax when it says: "Now, by following it [these lines] backward, we naturally reach that part of Long Island where ague was rife from 1850 to 1860, and, continuing the course, it carries us to New Jersey." *It is not too much to suppose that it came over from Long Island and New Jersey, etc., and possibly further south, etc.*

"Not too much to suppose that it came over." Innocent New England, where no fever yet was born. *Invaded*, and never productive of chills and fever. I admire this constructive ingenuity. It fits in so admirably with the desire of mill-owners; it is profitable as a diversion to juries and

[1] See also as specimens, Notes on Health of Towns in Massachusetts, 1872; Actor, p. 306; Cantor, 1870, p. 310. How often was the word typhoid used in a loose sense for fevers that were really malarial? See Halifax Huntington, p. 316, 1872, and very many such cases in the Yearly Notes on Health of Towns, also Drainage for Health, 1873, Mass. Rep., and various other evidences of local periodic fevers in the "Health of Towns" for each year.

courts, who would find excuse for prevalent evils by declaring that they come from afar. It is a hypothesis around which can be marshalled a host of phantasies and analogies. The shaking martyrs of the Connecticut and Housatonic can now pass from the cold stage into the hot and the sweating stage, declaring that chills and fever were never heard of until a wavy breeze of pestilence struck the high and healthy shore of the Sound, and invaded the lofty rivers, the upland marshes, the sunny forests, and the dry mill-swamps of New England. A marked exception to the imaginary wave line which occurred in several towns twelve years too soon is accounted for by the nearness of that part of Connecticut to Westchester County, New York, "*where ague is perennial, and may have received its impulse.*"

In this brief study of graphics, we confess to have come across a series of interesting facts which incline us to a far different hypothesis. It is that the Housatonic River in particular and Connecticut specially were the original habitats of this great pest.

As iron filings gather around a horse-shoe magnet, facts seem to be gathering to show that the Middle States were for scores of years free of malaria, while it was desolating, or irritating, or demoralizing the people of Massachusetts and Connecticut; that finally it was introduced by the migration of New England people and by the winds on the shores of Long Island; that it reached then Staten Island and the shores of New Jersey. The Dutch population of New Amsterdam and of Bergen County long withstood the general effects, but finally it obtained a foothold in Westchester and Hudson Counties. The great portion of this State is still exempt, and where it does prevail it is often with long intervals, and there is a strange correspondence between the dates of this malarial wave and its progress southward through the State. We yet may be able to show that the occasional marshes of New Jersey do not breed malaria until it is introduced from places further north. While we must not fail to protect ourselves by the most thorough drainage and by attention to all the laws of health, is it not high time that we appeal to the general government to make such a sanitary survey of the lands, marshes, and rivers of New England as will map out the malarial districts, and then call upon our New England brethren, by drainage and free watercourses, to deliver not only their own regions, but all the Middle States, from those risks of dissemination and extension of malarial particles to which they have so long exposed them?

While we do not at present commit ourselves to this hypothesis to all the extent which possibilities or probabilities might admit, and have not yet constructed an accompanying map, we do claim that the New England invasion hypothesis, which, we are happy to say, has been accepted by comparatively few students and statisticians among medical practitioners, is not sustained. There is need either to fall back upon the effect of local conditions or to construct a hypothesis which, if less comforting down East, will be nearer in accord with local facts and with he conclusions of skilled and well-tried observers.

## POISONING BY TWO DRACHMS OF ARSENIC; RECOVERY.

BY H. B. HEMENWAY, M.D.,
OF KALAMAZOO, MICHIGAN.

W. O., male, married, colored, age twenty-six years, hostler, generally strong and healthy, went, Monday morning, August 27, 1883, to a drug-store, and bought two drachms each of tartaric acid, powdered cubebs, and arsenic. He said that one of his horses was lame, and that he wanted to make a liniment for his foot. About eleven o'clock he took all of the arsenic and twenty-five grains of the tartaric acid, with suicidal intent. He soon after drank some water, and then vomited. He said that he vomited very little, but one of those in the house said he threw up about a quart of frothy mucus. After that first time of emesis, he did not throw up more until after the physician saw him at one o'clock P.M. At that time, the patient was lying upon his back, with eyes shut, frothing at the mouth. Temperature normal, but had complained of being cold. Pulse 80, full and strong. Ordered ʒss of mustard, to be given in water. This produced free emesis, but the family were not satisfied, and repeated the dose in the absence of the physician. At two P.M., the doctor gave freely of the sesquioxide of iron, and also six fluidrachms of castor oil. At four and a half P.M., no movement of the bowels having occurred, ʒiss of magnesii sulph. were given. Patient complained of burning pain in the pit of the stomach, extending also, though less intensely, over the entire abdomen, and behind the sternum to the throat. Head clear; said his tongue felt thick. Before seven o'clock in the evening, he had had several movements from the bowels. Urine passed freely. Ordered milk diet.

*August 28.* — 9 A.M. Patient passed a very good night, but did not sleep much until morning. Pulse 70, and weaker than the day before. Complained of chills, but temperature was normal. Complained of cramps in the abdomen and in the legs. Pain in the small of the back, on the right side. (When the patient vomited the day before, he lay upon his left side. The probability was, therefore, that the pain in the back was due to the straining at the time of emesis.) There was no headache. Patient complained of the thick and heavy feeling of his tongue. Urine higher colored than normal. No movements of the bowels since seven P.M. the day before. In the afternoon, ordered another dose of salts for him, which brought on three movements. No appetite.

*29th.*—9. A.M. Pulse 50, weak, and not full; patient complained of feeling weak; hands trembled; tried to sit up, but his head felt so light he laid down again immediately; had slept a little through the night; cramps troublesome in the legs; pain great in the right side of the back; patient restless and constantly picking at the bed-clothes; general tenderness over the abdomen; urine passes freely; no fulness around the eyes.

℞.—Tr. Digitalis,
Tr. Nucis Vomicæ, . . . āā ɱiij.
To be taken once an hour while awake.

4 P.M.—No special change.

*30th.*—9 A. M. The patient had passed a good night, slept well, and had taken a smoke of tobacco; appetite returning; still very weak; pulse 60, fuller, and stronger than the day before; great trembling of the arms and hands. The abdominal tenderness was not so great; cramps in the limbs and pain in the back still continue.

From this time until the patient was discharged, September 3d, he continued to improve rapidly, so that on the last-named day he came to the office, nearly a mile from the house. Though not as strong as usual, he was feeling pretty well.

From the beginning of the case to the end, there was no headache, no abnormal fulness around the eyes, no suppression of urine, but the urine was higher colored than usual. For the first two or three days there was some thirst. The most prominent symptoms in the case were the slow and weak pulse, muscular tremors, cramps, abdominal tenderness, and burning pain.

One other point in the case may be instructive. As has already been said, the patient bought two drachms each of arsenic and tartaric acid. The first article was put up in two papers; upon the outer one of these was the label "Arsenic—Poison," with the name of the druggist. For some reason, possibly because of the breaking of the paper containing the tartaric acid, after he had taken the arsenic he emptied the tartaric acid into the paper bearing the arsenic label. The man's sister-in-law snatched this package from him and delivered it to the physician as soon as he came. The physician went immediately to the drugstore and found what had been purchased, and then weighed the tartaric acid to find how much had been taken. Both arsenic and tartaric acid are white, and though they are quite easy to distinguish between, yet being labelled "arsenic," in his haste he did not doubt that it was arsenic, and it was not until the evening visit that he discovered his mistake. In this instance no harm resulted from the error, but under some circumstances the result might have been different.

## GALVANIZATION IN ACNE PUSTULOSA.

By E. STUVER, B.Sc., M.D.,
of Rawlins, Wyoming Territory.

Mr. C. A. P., æt. nineteen years, formerly of Boston, Mass., consulted me on October 12, 1882, and gave the following history: For about six months he has been troubled with an eruption on the forehead, cheeks, nose, and in a less degree on the chest. The eruption consists of quite a number of papules, about the size of a split pea, which inflame, suppurate, and in a week or ten days subside, leaving dark-colored cicatrices. This was soon followed by a new crop, and the same process repeated. Although he had used numerous remedies, the disease continued to increase in gravity, each crop consisting of a greater number of larger sized papules and pustules.

At the time of consultation, the following condition was noted: Face covered with numerous, large, inflamed papules and pustules, the intervening portions of cuticle being of a dark-rose color, and having a decidedly unctuous appearance. A number of dark-colored cicatrices and a great many comedones, especially about the nose, were noticeable. General health good, and no other trouble discoverable. His diet was carefully regulated, and the following treatment prescribed:

After carefully washing the face with some mild soap, ℞.—Hydrargyri chloridi corrosivi, grs. iv; Spts. vini rectificatæ dil., f℥j; Aquæ destillatæ, q. s. ad. f℥viij.—M. To be applied twice daily. And ℞.—Pilulæ arsenici iodidi (each) gr. $\frac{1}{100}$; one or two after each meal. This treatment was faithfully followed until October 28th, when no improvement being manifest, it was determined to try galvanism.

From October 28th to November 28th inclusive, thirteen applications of a current from six increased to ten cells of a Bartlett galvanic battery were made in the following manner: The positive sponge-covered electrode was placed over the stylo-mastoid foramen, or in that region, and the negative electrode brushed over the affected parts of the corresponding sides. After an application of this kind, lasting from five to ten minutes, the developing papules were touched by a conical-pointed electrode connected with the negative pole, the sponge-covered positive electrode being placed near the spot operated on; the most prominent comedones were then expressed, and finally the sponge-covered electrodes were applied for a few minutes as in the beginning. This order of application has several advantages, of which the following may be mentioned: the application of the sponges to the face as the first step brings into greater prominence the developing papules, as well as the comedones, which latter are more easily expressed after than before this application, owing doubtless to the contraction produced in the muscular elements of the skin. The final application of the sponges is for the purpose of increasing the tonicity of the sebaceous follicles, which is most effectually accomplished after the removal of their secretion.

There was some improvement during the month, but not very marked. The eruption began to be more discrete, and the papules, with their supervening pustules, smaller in size and more limited in duration; the skin also began to assume a more healthy appearance. While the application of the small conical electrode directly to the developing papules did not always prevent their further development and pustulation, it nevertheless had this effect on a considerable number of them, and in all cases exerted a decidedly beneficial influence in diminishing their size and abridging the duration of the eruption.

During December eight applications were made, with somewhat slow but constant improvement. In January, 1883, five applications were made, and the improvement was very marked and satisfactory. In February the current was applied four times, and the last application made March 6th, at which time the eruption had entirely disappeared, and the skin was of a very excellent color indeed.

I saw the patient July 2d, and found him free

from the eruption, and highly gratified with the excellent results of the treatment.

## THE VALUE OF PICRIC ACID AS A TEST FOR ALBUMEN.

BY CHARLES A. COOKE, M.D.,
AND
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IN making a series of observations on the character of urine in *malarial* cases at Bay View Asylum, picric acid and heat and nitric acid were used as tests for albumen.

After examining quite a large number of cases, we observed that while heat and nitric acid gave negative results in every instance, unless complicated by organic disease of the kidneys, picric acid invariably gave the albumen reaction. We concluded that there must be some other agent causing the precipitate. Cinchonidia, being the uniform remedy prescribed, was judged to be the factor. Acting upon this suspicion, we instituted a series of experiments to corroborate our theory.

*Experiment 1.*—We made solutions of sulphates of quinine and of cinchonidia in water (grs. iv–℥j), to each of which a small quantity of picric acid solution (1 to 56, sp. gr. 1010) was added. In each case, a yellowish-white, albuminous-looking precipitate was immediately formed. A solution containing $\frac{1}{120}$ of a grain gave a decided precipitate, and one containing $\frac{1}{180}$ of a grain a perceptible cloud. Heat and nitric acid failed to produce a reaction in each case.

Having established the above facts, we verified our theory by clinical application.

*Experiment 2.*—The urine of each of twenty-five patients was carefully examined before and after taking six grains of sulphate of quinine, or of cinchonidia. We found that heat and nitric acid failed to give a reaction in every instance, and that picric acid, although failing to cause a precipitate previous to the administration of the drug, invariably caused one nine or ten hours after.

*Experiment 3.*—To prove that the precipitate produced by picric acid was quinine, and not albumen, we made a solution of quinine and egg-albumen in water, which was boiled and filtered.

To a portion of the filtrate picric acid was added, and a decided precipitate was thrown down. Dil. acetic acid, alcohol, and tr. iodine—Herapath's test for quinine—were added to the remainder and heated. On cooling, the copper-green crystals were deposited. Picric acid was then added to the supernatant fluid, and no precipitate was produced.

In view of the free use of quinine and cinchonidia and their elimination by the kidneys, the above proven fact becomes of much importance, and seriously affects the value of picric acid as a test for albumen, especially so as the appearance of the albumen reaction, and of that produced in non-albuminous solutions in which quinine exists, cannot be differentiated by the naked eye.

Quinine must now be added to the objections set forth by Rayner W. Batten, of Gloucester, in the *Lancet* for November 11, 1882, to wit: 1. That an excess of albuminous urine dissolves the precipitate formed by picric acid. 2. Potassium salts are precipitated by it. These three objections, we think, weaken the claim of Dr. Johnson, of London, in regard to the superiority of picric acid as a test for albumen in urine.

BAY VIEW, Oct. 1, 1883.

## ON MASSAGE: ITS EFFECTS AND INDICATIONS.

BY A. HEILBRUNN, M.D.,
OF PHILADELPHIA.

THIS method of treatment, which has only been recently revived, was known to Hippocrates, Galen, and Celsus for these authorities praised the value of the effects of massage in all diseases of the joints, both acute and chronic. In a work published in 1557, Oribasius endeavored to give a physiological explanation of the results obtained by massage. In the last decade, expositions of massage have been published in a few medical journals, the clearest and perhaps best of which is contained in a lecture of Professor von Mosengeil, of Bonn, in the Congress of the German Society of Surgeons, which may be found in *Langenbeck's Archiv für klinische Chirurgie*, vol. xix.

The credit of the revival of this method of treatment is chiefly due to Dr. Johann Metzger, of Amsterdam, who made a great reputation through the methodical employment of massage according to scientific rules, as well as by the brilliant results of his treatment. Besides him, Esmarch, in Kiel, and Mosengeil, in Bonn, are the most celebrated representatives of this method of cure on the Continent. I pass over the technique of massage, presuming that its principles are theoretically known.

The practice of massage requires, first of all, the possession of a soft, fleshy hand, as a hard and rough hand is not adapted for its exercise. The different manipulations must be frequently exercised, requiring also great patience and perseverance on the part of the physician; for the results are not immediate, but appear, especially in chronic diseases, only gradually. In comparison with other methods of treatment, however, such as electricity, mineral waters, hot baths, etc., they are quicker and more evident to the patients.

In many acute diseased conditions, such as distortions, contusions, etc., the ameliorating effect is almost immediate, which is not the case after the ordinary application of ice. In addition to which, the disturbance of the functions of the parts is corrected soon after the employment of the massage. The rule hitherto practised of ordering absolute rest of the injured parts, and the application of firm bandages to secure immobility, is not necessary when massage is employed.

Since the manipulations of massage, as intimated above, require great practice, it cannot be exercised by every physician, but must be committed to those who devote special attention to it, as in the case of electrotherapy and hydrotherapy, the indications,

contraindications, and effects of which should be understood by every physician, but the technique only by those who have had considerable experience in their practical application. To them must be entrusted by the general practitioner the application of these therapeutic agents, just as he allows the physicians who have charge of bathing establishments to determine the special treatment of mineral waters and baths to patients committed to them.[1]

*What now can massage accomplish in general and in particular, and what also are its indications and contraindications?*

It is generally indicated in local diseases, in which an abundant quantity of nutritive material is necessary, or in which the excessive accumulation of the normal product of the tissue-changes, or pathological products, are to be removed through the centripetal channels, and, through the process of resorption and elimination, rendered innocuous to the system. Thus the effects of massage are explained by the contusion of the muscles and joints and the consequent extravasation of blood. It quickly removes pain and swelling, and acts safer, quicker, and also milder than ice, exemplifying the motto of Paracelsus: *Cito, tuto ac jucunde.*

By massage, the lumen of the veins and lymphatic vessels is not continuously contracted as by the application of ice, but they are momentarily affected only during the periodic stroke of the hand upon the contused portion of the body. Further, the manipulations of massage being made in a centripetal direction, the contents of the vessels are mechanically carried in the normal direction, and a vacuum is formed in their lumen, in which the backward column of blood or lymph, as also the blood extravasated by the injury, is absorbed. In this way, the pressure upon the nerves is diminished, or entirely removed, and the pain is relieved. By the removal of the extravasated blood, the obstruction to the circulation also disappears, while the tissue-change is increased, and, on this account again, the tissue elements, which are destroyed and have undergone fatty degeneration by the contusion, are quickly reabsorbed and regenerated, and healing rapidly follows. *Massage effects wonderfully soon the restoration of the functions of the joints which were entirely lost.* It prevents further the putrid destruction of the infiltrated portions of the tissues, the necessary nutrition of the injured tissues being provided for by the rapid removal of the impediment to the circulation in the blood- and lymph-vessels. Even in those cases of contusion without injury of the integument in which a part of larger dimensions stands in the relation of a foreign body, because every connection of vessels with their surroundings has been separated, massage, which exercises a pressure often repeated upon the necrosed tissues, and at the same time increases the absorbing activity of the vessels nearest the seat of the disease, causes fatty degeneration of the necrosed tissues, prevents suppuration, and is followed by the most favorable results.

[1] D. Graham in the Medical Record, 1879, vol. xvi., No. 2, p. 174.

For practical purposes, it appears to be especially important now to compare the effect of massage with the ordinary treatment of distortions and contusions of the skin, muscles, joints, and bones with application of ice, and the use of compressive bandages. As is well known, the object of the application of ice is through the irritation of cold upon the nerves, and further upon the skin, muscles, blood, and lymph-vessels, to contract them, to decrease the quantity of blood in the tissues, as well as to prevent inflammation. Actually, the swelling is soon diminished by the application of ice, and the pain is relieved. But the diminution of pain and swelling does not continue. There occurs a contraction of the vessels in the neighborhood of the swelling, a diminution of the afflux of arterial blood, an acceleration of the efflux of the venous blood and the lymph; but the actual blood extravasation is not mechanically forced again into the blood-current; for by the employment of ice the veins and lymph-vessels in the neighboring parts which are not involved are contracted, and exert a pressure upon their own inclosed column of blood and lymph, which does not permit the absorption of the extravasated bood, unless the application of ice is discontinued. While it does not altogether prevent absorption, only a very small quantity of fluid can circulate through the contracted vessels. The extravasation is only slowly removed by the application of ice, it remains, therefore, in the same place, and sometimes induces the formation of fibrin tumors, cysts, and swellings of cell-tissue.

At the same time, the ice contracts the arteries, and also presses the extravasation of blood upon the capillary vessels, so that in severe cases of contusion, gangrene is caused, and demarcation and suppuration take place in the gangrenous tissue, unfavorable results which sometimes follow when the contusions are treated with the application of ice, notwithstanding the integument may be intact. On the contrary, by massage, as we have before seen, the entire circulation is stimulated, and tissue-change is promoted, so that such disturbances in the healing process are not possible.

In regard to the compressive bandage which is so much used in contusions and distortions, in recent cases it causes an increase of the pain and may even favor the development of gangrene. But, if it is applied in a later period, it exercises ordinarily only a moderate pressure upon the diseased part, so that resorption takes place but slowly. Besides, its long-continued use causes an atrophy of the muscles, and the part of the body involved, by being condemned to rest, becomes weak and debilitated. By massage, however, the pressure is not constant, but only momentary. The exudate is broken up, soon changes into a fluid, and is quickly absorbed, especially if active and passive movements are constantly exercised. The compressive bandage should only be applied temporarily; for example, during the time of the removal of the injured person and the ice only when the injured portion can not be treated by the manipulations of massage. Still less than ice and firm bandage are fomentations of a lotion of lead, mercurial and iodine ointments,

the so-called resolvent liniments, derivant and absorptive means, equal to the efficacy of massage. In any case the so-called Priessnitz hydropathic cure should be combined with massage, being applied in the intervals of the manipulations and be changed from every quarter to half hour. Such are the *general indications* for the employment of massage. It is *contraindicated* in all suppurative diseases, also in malignant neoplasms, and finally in those diseases in which the formation of thrombi may be suspected. Massage may be followed by dangerous results by favoring the spread of infectious materials, the origin of embolisms and metastases, if it be employed without care and by unskilled persons.

*Especially* may massage be used in the following diseases with good results:

1. Contusions and sprains of the soft parts and the bones without breach of continuity.

2. Diseases of the joints of all kinds, both periarticular and intracapsular, bloody or serous exudations and extravasations, false ankylosis, white swelling, rheumatism of joints, gout, especially also the so-called neuroses of the joints.

3. Rheumatic affections of the muscles, tendons, and fasciæ, as well as hyperæsthesiæ and slight circulatory disturbances in the muscles.

4. Connective-tissue indurations, cicatrices, contractures, scleroses, inflammations of the sheaths of the tendons.

5. Paralysis following spinal diseases and after wounds, infantile paralysis, chorea minor, sciatica, commencing tabes, neuralgias, and writer's cramp.

6. Dyspepsia, chronic constipation, and hemorrhoids.

7. Chronic inflammations of the uterus and ovaries.

8. Catarrhal inflammations of the larynx and pharynx, both acute and chronic.

Recently massage has been tried with success by ophthalmologists. It has been used with good results by Pagenstecher in episcleritis and parenchymatous keratitis, and by D. Graham (*Boston*) in muscular asthenopia.[1]

In œdema from heart and kidney diseases, temporarily good results have been observed. In two cases of elephantiasis arabum, a six weeks' employment of massage effected an improvement. The combination of massage with gymnastics, consisting of active, passive, and double active movements, with the overcoming of resistance is very convenient. Further, during treatment patients must be allowed all possible use of their limbs. This is pleasanter to them than forced rest, and improves their general condition through restoration of tissue-changes. The latter is further favored, and the effect of the massage increased, through warm and hot baths with blankets, producing a profuse perspiration, and afterwards followed by a cold douche.

In the Russian and Turkish baths, the attendants are accustomed to knead and rub the whole body and make flexions and extensions of the limbs. Although these procedures produce an agreeable sensation, and in general may be of use, by exciting the activity of the muscles, and at the same time promoting tissue-changes, yet in diseased conditions less may be expected from these manipulations if they are exercised without direction. Especially, these masseurs are accustomed to rub along the periphery, which prevents instead of favoring the resorption of the pathological products. Besides, a steam-bath cannot be taken before every massage manipulation, which should generally be made once or twice a day.

On the contrary, massage exercised according to scientific principles has been followed by very surprising results, a few of which I will quote from recent German medical literature. These are communicated as especially remarkable by Eulenburg, the very distinguished director of a long-established gymnastic and orthopædic institution.

1. A lieutenant, M., had sustained, as a result of a fall from his horse during the French war, a luxation of the right shoulder-joint, with consecutive ankylosis (apparently true). After two years' use of the ordinary means, also treatment by baths in Wiesbaden, he came to Eulenburg for treatment, and was so perfectly restored by massage, with consecutive passive movements, that he was able to discharge his military duties without any inconvenience.

2. Lieutenant von D. received a fracture of both bones of the right leg in the neighborhood of the tibio-tarsal articulation. After union of the fracture, with considerable abnormal callous formation, there remained an ankylosis (apparently true), as a result of which the patient had to quit the service. By the use of massage, accompanied with passive movements, he was restored to a perfect capacity for service.

3. A Swiss confectioner was on the point of quitting his business on account of a white swelling of the right knee. After trying all ordinary means of treatment without success, he was completely cured by massage in the short period of four weeks.

4. Mrs. H. suffered for a year from hydrarthrosis, resulting from a rheumatic affection. After useless employment of all known means, a cure was effected by massage in the comparatively short time of six weeks.

918 NORTH ELEVENTH STREET.

[1] Medical Record, vol. 16, No. 8, p. 172.

## HOSPITAL NOTES.

### VIENNA GENERAL HOSPITAL.

Service of PROF. CARL BRAUN.

#### LABOR COMPLICATED BY CARCINOMATOUS STENOSIS OF THE CERVIX UTERI; HIGH AMPUTATION OF THE CERVIX, AFTER VERSION BY BRAXTON HICK'S METHOD, AND EXTRACTION OF THE FŒTUS.

(Specially reported for THE MEDICAL NEWS.)

THE case about to be reported deserves especial attention, as illustrative of a doctrine, growing in favor among modern German obstetricians.

The patient, thirty years old, unmarried, native of Austria, pluripara, in her seventh pregnancy, was ad-

mitted into the lying-in-ward of Prof. Carl Braun, at 7 P.M., 4th March, 1883.

The history of the case, as gathered from the woman's incoherent ramblings, was, that the bag of waters had ruptured four days previous to her arrival in the hospital, and that, since that time, she had felt pain at irregular intervals. Subsequent examination rendered her statements doubtful.

Abdominal palpation revealed a small-sized fœtus, presenting by the vertex. Fœtal heart-sounds were loud, regular, and frequent. By vaginal exploration, it was discovered that both lips of the os uteri were invaded by a neoplasm of globular form. The tumor in each lip was as large as a small-sized chicken's egg. The diseased tissue extended some distance into the cervical canal—two centimetres upon the right side, still higher up upon the left side—constituting a stenosis, which was passable for two fingers. Through the stenosis, the head, covered by the bag of membranes, could be felt.

The general appearance of the woman did not evince any degree of the so-called cancerous cachexia. At the time of admission into the lying-in-ward, the uterus was contracting with force, and pains, of an unusually severe character, were felt.

Prof. Carl Braun was immediately summoned by the clinical assistants, Drs. Felsenreich and Pritzl, in consultation.

Cæsarean section was suggested, but was rejected for the reasons: 1. That the fœtus was immature, although viable, and its chance for life slight. 2. Such an operative procedure would afford the mother the minimal benefit.

Hysterostomatomy, that is, deep incisions into the cervix, right and left, followed by podalic version and extraction of the fœtus, was regarded as impracticable. Prof. Braun proposed, as a last resort, that turning be effected after the method of Braxton Hicks, and that the child be extracted immediately after that operation.

Under Prof. Braun's supervision, Dr. Felsenreich succeeded, by external and internal manipulation, in turning the child. The extraction was effected with some difficulty, after the woman had been thoroughly anæsthetized. The placenta was expelled, after Credè's method, with ease. The parturition was immediately followed by an alarming hemorrhage. It was found, upon vaginal exploration, that the cervix was lacerated upon the right side to the extent of five cm., the rent extending into the parametrium. Both broad ligaments were at once transfixed and ligated with double ligatures. The lower third of the collum uteri was excised, after the arrest of hemorrhage, and the lips of the amputated portions carefully approximated with Hegar's suture. All hemorrhage had by this time ceased, and there remained two holes in the upper portion of the vagina, passable for the half-hand, one leading into the uterine, the other into the peritoneal cavity.

During the operation the patient was placed in Sims' position; the anæsthetic employed was the English mixture of chloroform, absolute alcohol, and sulphuric ether. The operation as thus performed, constituted a high amputation of the cervix uteri, completely removing the carcinomatous mass, after turning and extraction of the fœtus. The child, male, weight 2070 grammes, length 47 centimetres, was immature and was born apparently dead. It was speedily revived by the employment of Gustav Braun's balloon catheter, and is now in a thriving condition in the Foundling Hospital.

The mother experienced little shock from the operation, and, at the time of writing—ten day's after the operation—is in a promising condition. Her temperature during this period has not reached 39.5° C. Pulse and respiration have been nearly normal. Copious irrigation of the cervical portion with 2½ per cent. solution of carbolic acid in the half-sitting posture, was instituted upon the second day after the operation, and is continued at present. The vaginal discharge is considerable in quantity and has a slightly offensive odor.

## MEDICAL PROGRESS.

Geographical Distribution of Phthisis in the Eleven Northern Counties of Scotland.—At the late meeting of the Sanitary Institute of Great Britain, Dr. Simpson, the medical officer of health of Aberdeen, read a paper on this subject, in which he summed up as follows: 1. That phthisis has decreased in the North of Scotland during the last eleven years. 2. That phthisis is more prevalent on the north-west coast of Scotland than on the north-east. 3. That the east wind is not productive of phthisis. 4. That the elevated portions of the country do not stand out prominently, even although they are more thinly populated, as being freer from phthisis than the sea-coast on the east, or other low-lying situations. 5. That the Hebrides are not free from phthisis. 6. That local conditions, whether they be social or geological, or both combined, appear to have a greater influence on the prevalence or non-prevalence of phthisis than any general climatic agency. 7. If there is any climatic influence, the north-west wind, combined with excessive rainfall, proves injurious.—*Lancet*, September 29, 1883.

The Germ Theory and Disease.—At the meeting of the British Association for the Advancement of Science held on September 22, Dr. William B. Carpenter read a paper on this subject, which he treated from a natural history point of view. He pointed out the facility which the lower forms of life possess of adapting themselves to changed conditions of existence. He believed, although it has not yet been proved, that the same germs under different conditions give rise to various diseases; and these opinions he supported by various arguments. The decrease of the virulence of the smallpox which ravaged Europe in the fifteenth century, he attributed to the cultivation of the mildest cases which occurred, while a severe dose of any particular disease germ may so affect the system that a disease arises which cannot be recognized as related to that from which it proceeded. Under favorable conditions an ordinary intermittent fever (endemic) may develop into a virulent form, which is highly contagious. There was, in the opinion of the author, very strong ground for the belief that even the innocent hay-bacillus, which, when sown in broth or milk, simply causes its putrescence, and has no power of developing itself, in the human body may undergo such an alteration in its type as to become the germ of severe disease.

Notwithstanding, therefore, the tendency among modern pathologists to regard the various forms of zymotic disease as specifically distinct, and to attribute to inexact observation every recorded fact which ran counter to their preconceptions, the author held that the application of the natural history method to the study of these diseases fully justified the belief that the same germs undergoing development under different conditions might manifest themselves under a variety of forms, and maintained that a larger study of the history of medicine justified the belief that while some of these germs, breeding only in the human body, had acquired a considerable fixity, yet that this fixity did not necessarily hold good over the whole world or through all time; and that there was a large

class, including cholera and the various forms of fever originating in germs which breed in the soil as well as in the human body, over which the nature of the breeding-ground, with various atmospheric (possibly electrical) conditions, exerted a most important modifying influence. He held that this inclusive study, taking account of all the facts which science could bring to bear on the inquiry, was much more likely to lead to accurate results than the exclusive method followed by many pathologists.

RELATION BETWEEN THE FLUID ABSORBED AND THE URINE EXCRETED IN SCARLATINA.—According to PROF. GLAX (*Archiv für exp. Path. u. Phar.*, xxxiii. 200), there are three distinct forms of relation between the fluid absorbed and the urine excreted in scarlet fever. The quantity of urine is diminished only while the fever lasts, it then gradually rises to the normal or exceeds it for several days. In this form the course is very favorable, notwithstanding the high temperature at commencement. Secondly, the diuresis increases immediately after the cessation of the fever, but in the next few days sinks greatly, and during the whole course exhibits enormous variations. This course is not favorable when the patients become anæmic; œdema may occur, but the urine remains free from albumen. In the third form, the excretion of urine, which was diminished during the fever, during defervescence rises quickly to the normal or over it, and remains so for several days as in the first form. It then sinks rapidly and remains low until death; or after several days a copious flow of urine takes place, which sinks gradually to the normal. To this class all cases belong in which, after an apparently normal course at first, nephritis and dropsy occur. In these cases a diminution of the urine is frequently the first sign of subsequent complications before any albumen has appeared in the urine, or before any trace of œdema is observable. This is of considerable practical importance, as a careful observation of the body-weight and quantity of urine shows that increase in the weight of the body and coincident decrease in the quantity of urine indicate the approach of complications. These may be averted or greatly diminished by restricting the quantity of fluid absorbed, for generally it is observed that the diuresis increases as soon as the quantity of fluid ingested is reduced. The reason for this appears to be that the weakened heart is unable to cope with any large quantity of blood, and the rapidity of circulation necessary for the secretion of urine is not attained. The author considers also that the convulsions in scarlet fever are chiefly due to œdema of the brain.—*Practitioner*, October, 1883.

SUGAR AS A DRESSING FOR WOUNDS.—DR. F. FISCHER says that in the Strasbourg Hospital, where he is assistant in the surgical department, Professor Lücke has since May used powdered cane-sugar as an antiseptic dressing to wounds. Hitherto, it has been used in combination with naphthalin (equal parts) or with iodoform (1 part to 5 of sugar). In cases of wounds united by suture, the mixture is put up in gauze and applied to the part; where there is loss of skin, the sugar is sprinkled directly over the part. The sugar-dressing is fixed in place by some layers of gauze deprived of fat, over which a layer of gutta-percha is applied, and the whole is secured by a bandage. The sugar-dressing may remain from eight to fourteen days, without the sugar dissolving; the secretion from the wound is equally distributed through the sugar, and it is only when the layer of sugar is too thick (more than about one-fifth of an inch) that lumps are formed. The wounds have a healthy appearance under the sugar, the dressings are not offensive, and bacteria cannot be found in them. Healthy granulations, with no tendency to bleed, are developed; and cicatrization proceeds rapidly. In wounds united by suture, healing by the first intention has always been observed. Dr. Fischer is not able to say whether the sugar is decomposed, or what new products are formed. Writing in the *Allgemeine Medicinische Central-Zeitung* in reference to Dr. Fischer's communication, Dr. Windelschmidt, of Cologne, says that he has used sugar alone as a dressing with good results. He finds that for small wounds and ulcers powdered cane-sugar is not inferior to iodoform as a dressing, while iodoform is necessary in many cases, such as chancres and mammary abscesses. He calls attention to the fact that powdered sugar is a very old popular remedy in cases of fungous granulations, ichorous eczema, and erysipelas of the face. Whether the action of sugar is antiseptic, is not certain; that it is aseptic, is proved by its use in confectionery. In spite of his success, Dr. Windelschmidt has for several months desisted from the use of sugar as a dressing; partly because the patients found out the nature of the powder that was applied and ceased to trust in it, partly because they treated themselves, and so passed from his observation. He thinks, however, that sugar, like iodoform and naphthalin, has its sphere of application; and joins with Dr. Fischer in recommending that it be more extensively tried.—*British Medical Journal*, October 13, 1883.

SALICYLATE TREATMENT OF RHEUMATISM.—DR. ISAMBARD OWEN, in an elaborate statistical inquiry (*The Treatment of Acute Rheumatism*, 1883) into the results obtained in St. George's Hospital in 1877 and 1878 by the use of salicylates in rheumatism, arrives at the following results:

1. The duration of pain and fever after the beginning of treatment would appear to be independent both of the character of the cases (so far as defined by the range of temperature) and of their previous duration.

2. The duration of the primary attack does not appear to be affected by the amount of the initial doses of salicylate (within the limits given, viz., one and a half to three drachms in the twenty-four hours), or by the combination of full doses of alkali with the drug.

3. The duration of the primary attack after the commencement of treatment was only about half as long as under full doses of alkali.

4. In administering the salicylates, an advantage is gained in shortening the total duration of the case (*i. e.*, until convalescence is established) by restricting the initial doses and by combining with them full doses of alkali.

5. In respect of actual suffering, salicylate treatment showed a marked advantage when compared with alkaline treatment; the advantage was least marked where the salicylate was given in large initial doses without alkali, and hardly more so where the salicylate was given only in small doses; the advantage was more marked for the salicylate in moderate initial doses, and most marked of all where the salicylate was given either in large or moderate initial doses combined with full doses of alkali. In the two latter cases the total duration of suffering averaged hardly more than half that shown in the cases treated by alkali alone.

6. Summing up, the greatest aggregate of advantage is derived from a combination of salicylate and alkaline treatment, the salicylate (of sodium) being given in doses equivalent at the outset to two drachms in the twenty-four hours, and reduced as occasion requires. The alkaline treatment referred to consisted in the administration of doses of potassæ bicarbonas, or potassæ citras, of sufficient amount to render the urine alkaline. The salicylate was that prepared from carbolic acid. —*Practitioner*, October, 1883.

Resorcin.—Dr. F. Righi, of Lignago, gives the following summary at the conclusion of a paper on the action of resorcin:

1. Resorcin is well tolerated by the human system. Given in frequent or large doses it causes vertiginous sensations, roaring in the ears, redness of the face, and sometimes a sensation of heat in the stomach, with profuse perspiration in about two hours, and coloration of the urine.

2. In miasmatic affections it is a secure remedy against the febrile attack, and destroys the malarial infection.

3. It is efficacious in reducing recent enlargements of the spleen, but has no effect in chronic enlargements.

4. In typhoid fever, pneumonia, and erysipelas it is a prompt antipyretic, but has no influence on the pyrogenic element.

5. In acute gastro-intestinal catarrh it is of surprisingly rapid and certain effect when combined with bicarbonate of soda.

6. In chronic blenorrhagic urethritis it is to be preferred, for local use, over other more irritating remedies, and quickly restores the epithelium to the mucous membrane.

7. In conjunctival catarrh, whether acute or chronic, and in circumscribed affections of the cornea, it is very beneficial, and Masini recommends it as an efficient collyrium.—*Annali Univ. di Med. e Chirurg.*, July, 1883.

Resorcin may be used as a caustic in the crystallized form or in saturated solution. For vaginal or rectal injection it may be used in the simple form of grs. xv–xxx in f℥iijss of distilled water; for local applications, washes, sprays, inhalations, etc., resorcin grs. xv to f℥iijss of distilled water; for hypodermatic injection, resorcin ℈iv–℥v to f℥iijss of distilled water. A good form for external medication is resorcin ℈iv–℥ijss to ℥j of glycerine or vaseline; for internal use a good form is resorcin ℥ss–j, aromatic water ℥iij, simple syrup f℥j. This may be given in doses of f℥j or f℥ij every two hours, or it may be given in emulsion, or in milk. It should be remembered that, during the use of this drug, the urine will be colored green, or brown, or black.—*Gazetta degli Ospitali*, No. 75, 1883.

Paraldehyde—an Antagonist to Strychnia.—Prof. Vincenzo Cervello has made two series of experiments with paraldehyde, the first being on the physiological action of this drug, and the second as to its antagonistic action to strychnia.

Regarding the first point, experiments made on frogs, rabbits, and dogs go to show that paraldehyde has a narcotic action, producing a calm sleep not preceded by excitement or agitation, the respiration becoming calm, and the number of respiratory movements slightly diminished. With very large doses death took place by cessation of respiration, without convulsions or vomiting. The drug seems to be very rapidly absorbed; five minutes after it was given to a dog, by the stomach, its effects were produced. As regards reflex sensibility, it only produced annulment of reflex movements when full doses were given. Though its action is somewhat similar to that of chloral, the diminution of the number of cardiac contractions is not so marked as in the case of chloral, nor are the respiratory phenomena analogous. The drug is easily absorbed when injected subcutaneously or into the rectum. The after-effects are not unpleasant. Cervello recommends that it be given in a 3 to 100 solution of sweetened water or syrup, which has no disagreeable taste, and does not produce the characteristic burning sensation in the mouth.

*Antagonistic action to strychnia.*—In the second series of experiments three different methods were employed: 1. A non-fatal dose of paraldehyde was given, and then a dose of strychnia; 2. Fatal doses of strychnia were given, and then doses of paraldehyde; 3. The two were given simultaneously. To further assure himself, also, the experimenter gave one or the other of the drugs to the animal after the three methods had been tried. He found that paraldehyde completely antagonized enormous doses of strychnia, but that the administration of the latter did not interfere with the narcotic or other effects of the former, on the other hand, it only seemed to prolong the narcosis produced by paraldehyde.—*Bull. Gén. de Thérap.*, August 30, 1883.

Antimony in certain Skin Diseases.—In a paper read on this subject at the late meeting of the British Medical Association, Mr. Malcolm Morris advocates the use of antimony, in the form of tartar emetic, in doses of gr. $\frac{1}{240}$ to $\frac{1}{12}$, in certain skin diseases.

*Eczema.*—In the majority of the cases which have come under his care, its beneficial effect has been both marked and rapid. In the acute general eczema of adults, which usually commences somewhat suddenly by heat and burning on the flexor surfaces, and on other characteristic positions, and is soon followed by abundant exudation of clear fluid, and in the form known as eczema rubrum, he generally begins with four or five minims of the vinum antimoniale three times a day, increasing the dose gradually up to seven minims. After a few doses, the exudation ceases, and the local irritation is much relieved; but, in order to prevent a relapse, it is necessary to continue the treatment until all traces of the eruption have disappeared. In acute eczema of children, the dose should be in proportion to the age of the child—half a minim or less up to six months, and one minim or less up to a year. As a rule, he has found that both children and adults bear these quantities well, neither sickness nor diarrhœa being produced. In the case of aged persons, however, the dose should not exceed three or four minims to begin with, as diarrhœa may result from the administration of a greater amount.

In the subacute forms, both of children and adults, similar doses, but continued for a longer period, are necessary. In chronic eczema, especially when localized, the use of antimony is less often successful; but even in this troublesome form, it relieves the acute exacerbations, and is occasionally followed by cure when other methods of treatment have failed.

In eczema impetiginosum of children, he has noticed little benefit from the drug till the scabs have been removed, and formation of pus checked by local treatment. Simple impetigo contagiosa from a local cause is not included in this category.

In the various forms of so-called lichen that occur in children, he has found antimony in the previously mentioned doses of the greatest value in relieving the irritation—a feature in which it resembles arsenic.

*Erythema.*—The chief feature of this disease is that it is almost certain to relapse. By some authorities this is considered to be idiopathic erysipelas—the public always calls it so; by others, it is looked upon as a peculiar form of eczema, and said to be associated with gout. He has seen several cases, and is inclined to think it may be called relapsing erythema, as it has none of the dangerous qualities of genuine erysipelas. Antimony acts in this disease as in acute eczema, by shortening the attack and diminishing the severity of the symptoms. It should be continued for a considerable time after recovery, to prevent, if possible, a relapse.

*Prurigo.*—Three or four minims of the vinum, continued over a long period, allay the itching to a large extent, and often prevent the relapses of eczema. In several cases, after arsenic, iron, iodide of iron, cod-liver oil, and numberless other tonics had been tried, antimony was the only drug that produced any benefit

whatever. When given in the before-mentioned doses continuously for more than a year, he has never seen sickness, diarrhœa, sweating, or debility; but, on the contrary, the appetite improves and the weight increases. He has not had the opportunity of trying the remedy in a patient older than eighteen and a half years suffering from this disease; but in one particular case of that age, the benefit was most marked while the drug was being taken.

*Sycosis.*—He has given antimony in five well-marked cases of this disease; in four, it did not seem to produce any effect, either beneficial or otherwise; in the fifth, there was considerable improvement after the vinum had been taken a fortnight in seven-minim doses. It seemed to relieve the pain and burning; but, although the remedy was persevered with for over three months, the improvement was only temporary. The local treatment while the drug was being administered was olive oil or vaseline. In none of these cases was there any bad effect; no depression, diarrhœa, sickness, or sweating.

*Urticaria.*—In a few cases of chronic urticaria, he has found antimony, like arsenic, of service in checking attacks, so long as the remedy was continued.

*Psoriasis.*—Though, in the majority of cases of psoriasis, arsenic is to be preferred to antimony, he has elsewhere called attention to the fact that, in certain persons, arsenic not only fails to relieve, but even aggravates the disease. He has, in some of these cases, tried antimony, and has noticed in a few instances that improvement took place, while in others it seemed to have no effect.

The author wishes especially to lay stress on two points: first, that tartar emetic—in doses of $\frac{1}{240}$ to $\frac{1}{32}$ of a grain, according to age—can not only be tolerated, but seems to have a decided tonic action; secondly, that it proves useful in those acute forms of skin disease that are usually aggravated by arsenic.—*British Medical Journal*, September 22, 1883.

KIDNEY IN THE CANAL OF NUCK.—DR. J. D. HUBBARD reports the case of a woman, æt. 36, of previous good health, no fatiguing work, who took a dose of patent pills on Tuesday, July 24, 1883. The pills operated by the next day with considerable violence, causing intense pain and distressing straining. That afternoon she noticed a slight enlargement in the right groin; but, giving her no pain, she thought it was an enlarged gland, and paid no further attention to it, but retired as usual Wednesday night. On arising on Thursday, she discovered the labium majus of the right side greatly enlarged, yet it gave her no pain of consequence; the pain she did have was vague, and mostly referable to the spinal column; intense itching prevailed and caused her to rub the parts, until she found that rubbing did no good; this itching was a most annoying symptom. She then passed water and noticed that it was quite red; her appetite had entirely disappeared, she could not eat anything, not that she could not retain it on the stomach, but for want of inclination. She did not crave water, nor did she pass more or less than usual, though it continued red; bowels moved Thursday, passage looking normal.

The reporter saw the patient on July 28th for the first time. On examining the tumor, he found it to be about four inches long, and about two inches wide; the thickness could not be made out, as the patient was quite fleshy. It occurred to him that it might be a kidney.

On Monday, July 30th, the patient was anæsthetized, taxis applied, and, after a somewhat prolonged manipulation, he succeeded in getting the kidney started in the proper channel, when it went into the abdomen with a decided jump, not stopping until it reached the region of the umbilicus. It made a distinct wave as it passed up. Here he grasped the tumor and examined it. Two other physicians also examined it there, and pronounced it the kidney. It still floats in the abdomen. He has examined it several times since.

Further examination into the history of the case indicates that she has probably had a floating kidney for a year or two.

The next day after the reduction of the hernia, she found that her appetite had returned; she ate very heartily in the morning, also noon and night. She is recovering rapidly, and already going around. She wears a truss, of course.

How did the kidney pass through the canal when the patient was in the prone position and asleep? Certainly no very great pressure could have been exerted from behind. The following is offered as a hypothesis:

It has been already stated that Wednesday evening she noticed a small swelling; now this portion of the kidney had already passed a point of constriction; the arteries being somewhat resistant to pressure, allowed blood to pass into this little protruding mass, while the veins being more susceptible to pressure, prevented the ready return of the blood, and, in consequence thereof, hyperæmia supervened, resulting in œdema or extravasation and swelling: as the little mass grew larger, it either pressed the constriction over a little more kidney, or pulled more kidney through, which in turn filled up and drew down more, and so on, until the entire organ had passed, when, of course, the circulation was reëstablished, the œdema absorbed, and the kidney reduced to its original size.—*St. Louis Courier of Medicine*, October, 1883.

NEW METHOD OF SEWER VENTILATION.—The description and drawings of an ingenious contrivance for ventilating sewers and purifying sewer air have been forwarded to us. The idea seems so good that we regret we have not been able to see it practically applied, though it is stated that successful experiments have been made at Manchester. The apparatus is patented by Mr. T. S. Wilson, F. S. I., and Mr. H. T. Johnson, and is called the Patent Hygienic Furnace. Profiting by the proximity of the gas mains to the sewers, the patentees have constructed a gas furnace to be inserted in the man-holes. The gas is introduced into a little chamber, where it is mixed with a due proportion of air and supplies some Bunsen burners. Immediately above the gas there are some fireclay plates, which soon become heated; while above them are iron divisions. The heat naturally draws the air up from the sewer below; it passes through the Bunsen burners backwards and forwards over the fireclay plates and iron divisions, till at last it finds its exit in the ventilation chamber or man-hole, and hence through the grate into the street. The furnace not only causes a strong current of air from the sewer, but, as it is capable of being heated at from 600° to 700° Fahr., it should destroy all the germ life that travels with the sewer gas. Experiments with sterilized infusions of meat have been made, and whereas ordinary air drawn from the street soon caused the infusions to become turbid with animalcula and fungoid life, no such effect was produced by the sewer air taken after it had passed through this furnace. There is, however, one objection to furnaces when employed to ventilate sewers. They certainly produce a very active suction, but the effect, however energetic, only extends to a short distance. We would therefore suggest, that these ventilating furnaces should be as as small and as inexpensive as possible, so that a large number of them might be used, and these at very short intervals.—*Lancet*, September 29, 1883.

# THE MEDICAL NEWS.

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SATURDAY, OCTOBER 27, 1883.


## CLINICAL RESULTS OF NERVE-STRETCHING.

IN the *Annali Universali di Medicina e Chirurgia*, for March, 1883, will be found an elaborate paper on elongation of the nerves, with a statistical table of 512 cases, from the pen of DR. VINCENZO OMBONI, of Cremona, from which it appears that, of the entire number, 185 were cured, 229 were ameliorated, and 98 were not benefited, the latter including 48 deaths from the affection for which the measure was resorted to, and 12 deaths in consequence of the operation. As the contribution is the most complete of which we have any knowledge, embracing, as it does, over one hundred cases more than were collated by DR. W. J. CHANDLER, in the *Medical Record*, vol. xxii. 1882, we think that we will do our readers a real service by presenting them with an analysis of its contents.

The operation was practised for neuralgia 222 times, with 143 cures, 62 ameliorations, 16 failures, and 1 death, as its direct result. Of the entire number, 62 were examples of neuralgia of the trigeminal and optic nerves, of which 31 were cured, 24 benefited, and 7 failed. 6 cases of neuralgia of the spinal nerves, that is to say, 2 of the intercostals, 2 of the occipitals, 1 of the spermatic, and 1 of the genito-crural, afforded 4 cures, 1 temporary benefit, and 1 failure. Of 37 cases of neuralgia of the nerves of the upper extremity, 23 were cured, 13 were benefited, and 1 failed. Of 117 instances of neuralgia of the lower extremity, in which the sciatic, as a rule, was the nerve stretched, 85 were cured, 24 benefited, 7 failed, and 1 died of pyæmia.

Of 25 contractures with clonic spasms, 11 were cured, 13 benefited, and 1 failed. In 2 of these cases the spinal accessory was elongated, of which 1 was cured and 1 failed. Of the 13 contractures with tonic spasms, 8 were cured, 3 were benefited, and 2 failed. Of 3 contractures without convulsive movements, 2 were cured, and 1 failed. Of 41 cases of contractured muscles, therefore, 21 were cured, 16 benefited, and 4 failed.

For epilepsy, 7 cases show 2 cures, 4 benefits, and 1 failure. The successes were instances of reflex epilepsy. Of 51 operations for tetanus, the author states that 10 were cured and 42 died. The discrepancy appears to be due to the fact that he rates one case as a cure, which died subsequently of erysipelas, so that there were in reality 9 cures and 42 deaths, of which all but one were due to the onward progress of the disease. Eleven of the fatal cases showed a temporary improvement.

Of 40 cases of peripheral paralysis, 2 were cured, 36 benefited, and 2 failed. 6 of these were for motor paralysis, of which 2 were cured, 2 benefited, and 2 failed, the 34 examples of sensory paralysis having been merely ameliorated.

The nerve was stretched for various affections of the central nervous system 149 times, with 5 cures, 100 ameliorations, 27 failures, and 17 deaths, of which 10 were ascribable to the operation. For myelitis, 44 cases afford 1 cure, the success having been one of crural neuralgia following fracture of the vertebræ, 20 ameliorations, 18 failures, and 5 deaths. Of the 4 examples of paralysis agitans, 1 was cured, 1 was benefited, and 2 failed. 2 cases of athetosis gave 1 cure and 1 amelioration. The 99 cases of ataxia resulted in 2 cures, 78 benefits, 7 failures, and 12 deaths.

Finally, the sciatic nerve was stretched successfully once for chronic pemphigus, and once for senile pruritis.

From a careful study of the tables of Dr. Omboni, it appears that elongation of the nerves may be employed with very decided advantage in peripheral neuralgia and in spasmodic muscular contractures which have resisted the ordinary methods of treatment; and there is every reason to believe that it will supplant, in great measure, neurotomy and neurectomy in the former affection. In neuralgia of the cranial nerves, the procedure does not justify the adverse opinion of Nicaise, expressed in the *International Encyclopædia of Surgery*, vol. iii. p. 628, that stretching of the cranial nerves "should be done with reserve and prudence, in the fear of immediately fatal reflex effects, or of trophic disturbances," since none of these ill effects have followed the elongation of the trigeminal branches in fifty-three instances, and of the optic in nine cases. The question of benefit, in consequence of the comparatively few cases hitherto recorded, must

remain an open one in epilepsy, peripheral motor paralysis, athetosis, paralysis agitans, senile pruritus, and pemphigus, although the 2 cures and 1 amelioration in the three examples of reflex epilepsy, and the 2 cures and 2 ameliorations in the 6 cases of peripheral motor paralysis, must be regarded as encouraging results. In peripheral sensory paralysis, as, for example, in anæsthetic leprosy, all the cases were benefited, but none cured. For tetanus, if employed early, it is not only justifiable, but worthy of extended trial. In chronic myelitis it holds out little encouragement. The worst results have been obtained in ataxia, and it should not be resorted to in this affection unless the pain is excessive, and there is a fair prospect of primary union of the wound.

As the sciatic is of all the nerves the one which is most frequently subjected to stretching, it is desirable that, in the future, the bloodless method of Trombetta, which consists in forced flexion of the thigh on the pelvis, while the leg is extended upon the thigh, shall be given a fair trial. Of the 117 cases of nerve-stretching for neuralgia of the lower extremity, the sciatic was elongated in the usual manner in 102, 1 proving fatal from pyæmia. Of 2 additional examples, from the practice of Medini, reported in the *Bullet. di Sc. Med.*, No. 3, 1883, 1 died of necrotic phlegmon of the thigh on the fourth day; and this death-rate of two per cent. doubtless represents the actual mortality of the procedure. Of course, it is a desideratum to avoid the dangers and inconveniences of a bloody operation if an efficient substitute can be found for it. Whether this substitute will be forced flexion remains to be seen, since the cases recorded up to the present time are too few upon which to base an opinion as to its therapeutic value. Adding to the 9 cases collated by Omboni the 2 recorded by Medini, the 11 afford 9 cures, 1 palliation, and 1 failure. Of the 104 cases of stretching the sciatic after preliminary incision, 71 were cured, 25 benefited, 6 failed, and 2 died; so that, with these data before us for comparison, the bloodless operation will be seen to yield a greater proportion of cures, while it has not proved fatal in a single instance.

While it has heretofore proved to be safe, the bloodless procedure is now and then attended with subcutaneous rupture of muscles, as indicated by an audible snap and extravasation of blood. In the case of Fiorani, reported in the *Annali Univ. di Med. e Chir.*, for February, 1883, the muscles on the back of the knee gave way, and in one recorded by Medini, the biceps, semimembranosus, and semitendinosus were torn; but in neither example were the ill effects permanent. Fiorani, moreover, points out that the quadratus femoris is contused by forced flexion, and he has even seen it divided in the cadaver by the tremendous pressure exerted upon it by the nerve in its passage across it.

### THE ACTION OF BENZINE AND NITROBENZINE.

THE free use of benzine in the arts, and the consequent dangers to health and life, render some notice of its action timely. Its physiological effects have been studied by Drs. Neumann and Pabst by experiments on animals, and by the analysis of the toxic symptoms as observed in man. There is a close resemblance in the effects of benzine and alcohol, ether and chloroform. The influence of this substance is exerted especially on the cerebrum. Its first effect is excitant, and this is followed by disorders of voluntary movement, of sensibility (anæsthesia), and of the mental faculties (hallucinations). Amongst the effects observed from its chronic action are antaphrodisia and black discoloration of the teeth and the margin of the gums. Benzine is eliminated almost entirely by the lungs, only a small part of that taken appearing in the urine as phenol and other products.

Nitrobenzine is more powerful. Its effects do not follow immediately, from a half hour to an hour, and sometimes a longer period, elapsing before symptoms are manifest when its vapor is inhaled. The face becomes livid, the integument especially of the face and extremities assumes a bluish hue, and an odor of bitter almonds is exhaled. Convulsions, cramps of certain muscular groups (trismus, opisthotonos) are amongst the nervous symptoms induced by it. Of forty-four recorded cases of its toxic action, fourteen proved fatal, and thirteen of these occurred after the stomachal administration—facts apparently demonstrating that the inhalation of the vapor is less dangerous. There appear to be no characteristic lesions, but in all cases fluidity of the blood has been noted, the red blood-globules are damaged, and hæmoglobin is transformed, to some extent, into hæmatin.

### FEMALE PHYSICIANS IN INDIA.

"WITH regard to the fitness of women for medical practice, in this country opinions differ," says the London *Times*, "but in the case of India there need be no discussion about fitness, for the simple reason that there the question is not one between women and men, but between women and no doctors at all."

Any one familiar with the beneficent results following the labors of the female physicians sent out by the Zenana Missions, both in this country and England, will acknowledge the justice of the statements of the *Times*. The native women, especially those of high caste in the Zenanas, are absolutely shut out from skilled medical aid, since they cannot

be attended by men, not even in any ordinary illness or accident, much less in confinements or any female diseases.

The only way to remedy this dreadful state of affairs is to provide for them physicians of their own sex, and this America and England are doing. And the results of the effort are far wider than would seem probable at the first glance. Not only are the physical ailments of the women treated skilfully—for the female physicians sent out are capable, and have been thoroughly trained—but the moral influence exerted towards the destruction of the "caste" system with all its evils, and especially towards the abolition of the systematic seclusion of women will be widespread and powerful, to say nothing of its strictly religious influence, which is at least no less beneficent.

It is not a little significant, that right upon the heels of such an editorial in the *Times*, comes the announcement of the fact that Mrs. Joshee, a young native Indian woman of *high caste*, has left her country and entered upon a course of medical study at the Woman's Medical College of Pennsylvania. From a religious and social point of view it is one of the startling facts of the nineteenth century, the significance of which can only be appreciated by those who are familiar with the rigid rules of the Indian mode of life. She is not a "Christian," but a "heathen" woman who has dared to take this step and yet preserve her "caste" intact, and she will go back to India to minister to her sisters in their sicknesses and accidents, as not even a foreigner, woman though she be, can do.

It is indeed the first step towards filling the need that the *Times* suggests, that not only foreign "Christian" women should be educated as physicians, but also the intelligent native women themselves. The number of the former class can hardly be increased to such an extent by the missionary societies as to afford the requisite relief to the millions of Indian women: the number of the latter can be increased indefinitely.

Queen Victoria has lent her powerful aid to the movement to provide medical aid to her female Indian subjects, by her gracious and conspicuous reception of Mrs. Scharlieb before her departure for Madras; and the sympathies and discreet aid of Mr. Rivers Thompson, the Lieutenant Governor of Bengal, are understood to be heartily in accord with the movement, which will thus feel the impulse of the highest official aid, both in India and in England.

## RENAL CIRCULATION DURING FEVER.

REASONING from the very frequent, if not constant, presence of albuminuria attending high grades of fever, it has generally been supposed that the kidney is at such times hyperæmic and enlarged. But if the observations of DR. WALTER MENDELSON, published in *The American Journal of the Medical Sciences* for October, 1883, be correct, it will be necessary for us to modify materially our views upon this subject.

Dr. Mendelson's experiments were made in the Pathological Institute of the University of Leipzig, under the direction of Prof. Cohnheim. The animals experimented upon were dogs, the kidney being carefully drawn out, and placed in an ovoid box known as an oncometer or "bulk measurer." Within this box the kidney is surrounded by some liquid, as oil, which is displaced by any increase of volume which the organ undergoes. The vessels, nerves, and ureter are carefully guarded from injury as they pass out of an opening in the side of the box. A feverish state is induced in the animal by injecting into the blood fresh gastric juice, and its immobility is secured by destroying the optic thalamus of one side. The displaced oil communicates with a graphic instrument known as the oncograph, which produces a tracing on a revolving drum, whence it appears that *during fever a progressive diminution in the volume of the kidney occurs.*

That these changes in the volume of the kidney depend on the amount of blood contained in its bloodvessels is inferred from the fact that the kidney contains no contractile elements outside of the vessels.

Dr. Mendelson's experiments also went to show that this contraction, which is proportionate to the degree of the fever, is the result of a stimulus conveyed to the vessels from the central nervous system, and that this stimulus is the consequence of irritation of the central vaso-motor centres by the abnormally hot blood circulating through them during fever.

Two important phenomena of fever must receive a different interpretation if these views are correct. These are, the decrease in the amount of urine secreted by fever patients, and the albuminuria. The former has heretofore been ascribed to the increased loss of water through the skin and lungs, whereas, according to Mendelson's results, the primary condition is a diminished blood-pressure and a retarded current within the organ, which must be followed by a lessened secretion of urine. The albuminuria so constantly present in high fever is to be ascribed to the anæmia of the kidney, in consequence of which the glomerular epithelium is too insufficiently nourished with arterial blood to enable it to perform its function of retaining within the vessels the albumen of the blood-plasma.

We hope that these experiments may soon be repeated, for, if verified, other important deductions

will follow, whence practical advantages may be expected.

### THE INITIAL LESION OF SYPHILIS.

IN a paper recently read before the British Medical Association, and published in the *British Medical Journal*, of September 22, 1883, MR. BERNARD, Surgeon to the Liverpool Lock Hospital, makes some interesting additions to our knowledge in regard to the situation, period of incubation, and the forms of induration of the primary syphilitic lesion, which should prove to be valuable to those who are especially concerned with these objects of inquiry.

The primary lesion was met with on the inner surface of the prepuce in 118 cases; in the furrow in 71; on the corona in 45; on the skin of the penis in 26; on the outer surface of the prepuce in 23; on the body of the glans in 21; on the frænum in 11; at the meatus in 10; on the free border of the prepuce in 4; and in the urethra in 1 case. It will thus be seen that the prepuce, including the frænum, was the most usual site of the lesion, the furrow behind the corona coming next in order, and that the corona was attacked oftener than the body of the glans.

The period of incubation in sixty-nine cases varied from one to fifty-six days, the average being a little under twenty days, which agrees pretty closely with the generally accepted average of the end of the third week. An interesting point in this connection is the preference given to the multiples of seven as the most usual dates of the outbreak, it having been met with forty-three times out of the sixty-nine. This fact was observed by Fournier in twenty out of forty-five inoculations, and by Lowndes in twenty-five out of forty-seven cases.

Mr. Bernard finds that the induration, in the male, is best marked when the sore is situated on the inner surface of the prepuce and the furrow, where it feels like a piece of cartilage. When the gland is affected, the sensation is rather that of a thickening than of hardness of the part. At the free border of the prepuce, the induration, although characteristic, is not so elastic as when the lesion is seated on its inner surface. Absence of induration is common when the skin covering the body of the penis is involved, but, when present, it feels like parchment. In the female it is best marked on the nymphæ. When seated on the greater labium the sensation is similar to that when the lesion occupies the glans penis. In the fourchette the induration is not characteristic.

### THE NEW CODE IN NEW YORK.

IN the controversy which has been agitating the profession in New York for nearly two years, many physicians have been led into the advocacy of the New Code by the specious cry of "liberty of action," others by the idea, which has been more ingeniously than ingenuously put forth, that by throwing down all barriers between medicine and "the pathies" we would win over the practitioners of the latter, and, in some mysterious but unexplained way, we would thus advance the cause of scientific medicine.

We have never been able to accept these views. In fact, we have earnestly believed that there is but one way of attaining the eternal truth of science, and that is by quietly, but steadfastly, pursuing it until we reach the goal of demonstration, and that it does not become the true student of medicine, nor the dignity of his profession, for him to impede its progress by stooping to fraternize with what he believes to be a false science, because of any temporary advantage which might possibly accrue to him from this act, which, in this case, must have for its chief result the misleading of suffering humanity.

It is, therefore, with extreme regret that we learn of the approval of the New Code, which has been expressed after mature consideration and careful canvass by the majority of the Academy of Medicine and of the County Society of New York. We are confident that all these gentlemen, imbued with the true scientific spirit, are ready to accept any fact which is demonstrated to be true, from whatever source it may come, yet they have given a formidable stab to rational medicine by declaring that the so-called medicine of unreasoning dogma, in which they do not believe, shall be recognized as its mate. Their action misleads the public, which naturally looks to educated physicians to protect them from medical charlatanry, and deals a heavy blow at the honesty of medical science, the consequences of which we shrink from considering.

### COMPARATIVE ACTIONS OF CONINE AND CURARA.

THE difficulty experienced in procuring a sufficient supply of curara, and the very great variability in the activity of the commercial specimens, render it very desirable to procure an efficient substitute. This has been found apparently in conine. Until a stable preparation of the lattter had been made available, however, there was little practical utility in the suggestion. The bromhydrate of conine is both stable and readily soluble, and can therefore be employed with ease and certainty. It may be useful to recall to our readers' attention the points of resemblance, as they have been set forth in a series of comparative observations by SCHULZ and SCHROFF.

The paralysis caused by curara and by conine is due to an action on the terminals of the motor nerves, and on the nerve-trunks, the muscular contractility remaining unaffected.

Like curara, conine produces slight muscular

contractions, especially in the muscles of the face and extremities.

Like conine, curara has a more decided paralyzing action on the pneumogastric than on the motor nerves of the heart. Prevost and Kölliker have noted that the salivary, lachrymal, and urinary secretions are increased by conine, and Luchsinger has observed the same results from curara.

The resemblance of these agents is thus so complete, that there is little doubt conine may be substituted for curara in physiological investigations as in the treatment of morbid states.

## SOCIETY PROCEEDINGS.

### NEW YORK ACADEMY OF MEDICINE.

*Stated Meeting, October 18, 1883.*

THE PRESIDENT, FORDYCE BARKER, M.D., LL.D., IN THE CHAIR.

AFTER the reading and approval of the minutes of the preceding meeting, and the reception of the report of the Chairman of the Library Committee, the Academy went into a Committee of the Whole, for the consideration of the proposed amendments to the

CONSTITUTION AND BY-LAWS,

Dr. Ellsworth Eliot taking the Chair.

DR. AUSTIN FLINT, JR., said that he had no remarks to make in regard to the amendments, except to say a word or two in explanation similar to the statements which he had made two weeks before. There seemed to him to be no reason for discussing the amendments either in the Academy or the Committee of the Whole, and he was unable to see why a scientific paper had not been presented at the last meeting. It would have been sufficient, simply to give notice that certain changes in the Constitution and By-laws were proposed, and that action would be taken on them at the following meeting; after which the regular scientific work of the Academy could have been proceeded with in the ordinary way. He humbly submitted that the remarks of the gentleman who proposed and seconded the adoption of the amendments had not been in order, for the reason that the latter were not before the Academy for adoption on that occasion, and could not be, according to the Constitution and By-laws. He was here to-night, he continued, as the spokesman of a number of members who believed that the welfare and usefulness of the Academy of Medicine could be best preserved by strict adherence to the National Code of Ethics, and who are uncompromisingly opposed to these amendments—one and all. The amendments, as was well known, had one great object, viz., the elimination from the Constitution and By-laws of everything relating to ethics. They would reduce the Academy to the level of the many smaller medical societies of the city; making it a purely scientific body, with nothing whatever to do with the general welfare of the profession as regards the ethical conduct of its members. Of course, the elimination from the By-laws of the by-law which adopts the Code of Ethics of the American Medical Association, necessitates a certain amount of change in the wording of the Constitution and By-laws in other particulars. That issue is perfectly distinct. Every gentleman here to night who is in favor of maintaining the Code of Ethics that has been adopted by this Academy, will vote against every one of these amendments. He did not believe that any eloquence was sufficient to convert those misguided members of the profession who believed in another Code of Ethics or who believed in making the Academy a no-code organization. If adopted, however, they would leave the Academy without any Code whatever, and this he considered even worse than to accept the new Code. There was one point to which Dr. Flint wished to call the attention of the Fellows of the Academy. Not only do these amendments abolish the Code of Ethics, but in the tinkering (he said he used the word with respect) that has been done to these By-laws, it became necessary to provide that the Council should not appoint delegates to certain bodies, for the simple reason that without a Code of Ethics they could not appoint, or were not entitled to appoint, delegates anywhere. Another point was in regard to a quorum of the Council, which was now constituted by nine members, but by the amendment would be reduced to five. The duties of the Council, he said, were multiform and of great importance, and the proposed amendment put it in the power of three members to adopt measures involving the greatest interests of the Academy, and to take the initiative in disposing of its funds, and in other matters of the greatest importance. He wanted to see the quorum of the Council kept as it was, and he was informed on the best authority that a quorum had hitherto never been lacking, except, perhaps, at some of the meetings in the middle of summer. In conclusion, he stated that at no time in the history of the Academy had any amendments to the Constitution or By-laws ever been adopted which had failed to secure the endorsement of the Council; and, furthermore, that at no time had the Council ever made any recommendation which was not adopted by the Academy. It was simply ridiculous to suppose that a three-quarters vote (which was required by the Constitution and By-laws) could be secured in favor of the adoption of the amendments.

DR. FLINT then moved that the Committee of the Whole should rise.

The motion was seconded and put, and the Chair decided that it was carried.

DR. ROOSA appealed from the decision of the Chair, but the latter was sustained.

DR. ELIOT, Chairman of the Committee of the Whole, made his report, and THE PRESIDENT called for the reading of the resolutions adopted by the Committee of the Whole at the last meeting. (These resolutions recommended the adoption of the proposed amendments.)

DR. FLINT, JR., claimed that this was not in order, and the President maintaining that it was, Dr. Flint appealed, when the Chair was sustained.

The resolutions were then read by DR. W. M. CARPENTER, Secretary of the Committee of the Whole.

DR. FLINT, JR., moved that the report of the Committee of the Whole be laid on the table.

DR. ROOSA, with four others, called for the yeas and nays.

After some discussion as to whether the register in which the members had recorded their names on entering the hall, or the full roll of the Academy should be used for calling off the names, THE PRESIDENT decided that the register was sufficient.

DR. FLINT, JR., then appealed from the decision of the Chair, but the latter was sustained by a vote of 88 to 84. The yeas and nays having been taken, the motion to lay the report of the Committee of the Whole on the table was found to be lost, the vote standing 114 against to 96 in favor of the motion.

DR. A. L. LOOMIS moved that, when the question of the adoption of the amendments was put, the vote should be taken by ballot.

DR. AUSTIN FLINT, SR., offered, as an amendment

to Dr. Loomis' motion, that the question of the adoption of the amendments be indefinitely postponed; and Dr. Loomis not accepting this, the yeas and nays were called for on the amendment. The amendment was found to be lost by a vote of 117 opposed and 95 in favor of it.

On motion, the balloting on the adoption of the amendments was then proceeded with, the Chair having appointed Drs. H. D. Nicoll, Daniel Lewis, and Arthur M. Jacobus, the assistant secretary, tellers. The result showed 121 votes in favor of the adoption, and 92 opposed, and the Chair announced that the amendments were lost.

DR. BARKER now asked the indulgence of the Academy for a few minutes, and said that, in such a body, with its high aims in science, honor and duty demanded of the members that all should acquiesce submissively in the result which he had just announced with great pain and regret. The letter which he had prepared to the Fellows had expressed his views on the present unfortunate state of the Academy, and the importance of the amendments to its organic law which he had proposed. He had, however, failed to convince a sufficient number of the wisdom of the course suggested, and he must acquiesce in the verdict. No one could say that he had endeavored to secure the passage of the amendments by personal solicitation of the members, for he felt that such a matter should be left to the judgment and intelligence of a body of men, such as the Academy is composed of, unbiased by prejudice and free from passion. He begged most earnestly that all past controversies, so far as the Academy was concerned, would be forgotten. He was convinced that very many of these differences had arisen, not so much from differences in principles as from differences in detail. For himself, he could only say that in the future, as in the past, he would give his best effort—and he begged all present to give their best efforts—to keep up the high scientific position of the Academy, and to support and increase their beautiful library for which they were indebted to so many liberal benefactors.

DR. LOOMIS then offered a resolution to rescind the resolutions proposed by Dr. Flint, Jr., and adopted at the last meeting of the Academy in the spring, which provided that the Committee on Admissions should propose for election to membership the name of no non-candidate who was not known to be in favor of the Code of Ethics of the American Medical Association as adopted in the By-laws of the Academy.

In moving this, he remarked that the Fellows were not here to decide the code question. The spirit of the meeting was above such a low plane as this, and they were here to decide the welfare of the Academy, whether it should sustain the high position which it had hitherto occupied, or sink into degeneracy and anarchy. The latter alternative was inevitable as long as these objectionable resolutions remained in force. These had been the firebrand which had disturbed the peace of the Academy, and as long as they stood unrescinded, the same unpleasant scenes which had of late been enacted in this hall would occur again and again.

DR. FLINT, JR., claimed that Dr. Loomis' motion was out of order, for the reason that it involved nothing more or less than a reconsideration of the resolutions proposed by him, and adopted by the Academy; and at the meeting at which they were framed, a reconsideration had been moved and carried, and after this it was voted indefinitely to postpone the reconsideration.

THE PRESIDENT having decided that the point of order was not well taken, on the ground that the rescinding of a resolution was of a different nature from its reconsideration.

DR. FLINT appealed from the decision of the Chair, but the appeal was not sustained.

Discussion of Dr. Loomis' resolution now being in order, DR. D. B. ST. JOHN ROOSA made some remarks, comparing the action of the State Medical Society, in regard to the Code of Ethics, with that of the Academy; but they were decided out of order by the Chair, as not bearing directly on the question.

DR. C. R. AGNEW then endeavored to prove that the resolutions of Dr. Flint were a violation of the Constitution. In the first place, the Constitution provided only two qualifications for membership, viz., that the candidate should be a graduate or licentiate in medicine, and that he should have resided in this city and county, or in either of the counties of this State adjoining for the term of three years; but these resolutions introduced a third qualification, viz., adherence to the Code of Ethics of the American Medical Association. In the next place, the resolutions were in reality in the nature of an amendment to the Constitution, and the latter provided that no part of it (the Constitution) should be altered, except at a stated meeting subsequent to one at which a proposition to that effect should have been made in writing, and then only by a vote of three-fourths of the resident Fellows present. Instead of giving the required two weeks' notice, however, action had been taken at once on the resolutions, the only notice being a secret circular which was addressed to those known to be in favor of such action. When the resolutions had been passed, a certain movement of conscience seemed to have troubled the leaders of the Old Code party, and they had then resorted to some parliamentary sharp practice in order to render the action taken as permanent as possible.

A motion to adjourn was made at the conclusion of Dr. Agnew's remarks, and lost, and Dr. Loomis' resolution was then put and carried; after which the Academy adjourned.

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## THE PHILADELPHIA COUNTY MEDICAL SOCIETY.

*Stated Meeting, October 17, 1883.*

THE PRESIDENT, WILLIAM M. WELCH, M.D., IN THE CHAIR.

DR. JAMES C. WILSON presented the following

NOTE ON HYDRARGYRUM FORMAMIDATUM:

Some accounts of this preparation have appeared in recent journals. Towards the close of last year, Prof. Liebreich proposed, in a meeting of the Berlin Medical Society, a new drug for the treatment of syphilis by the hypodermic method. Chemically, this drug belongs to the amide group. Liebreich was led to use it from the fact that the ordinary amides of the body, of which urea is the principal one, are eliminated in an undecomposed state. When, however, the amide is in combination with a metal, decomposition occurs, and the metal is reduced and deposited. Liebreich found, by actual experiment, that this statement is true of mercury. It is supposed that the formamidated mercury, after hypodermic injection, undergoes decomposition, and that the metal mercury is set free in the tissues. The preparation is soluble in water, of neutral reaction, does not coagulate albumen, is not precipitated by caustic soda, and the presence of mercury can be demonstrated by potassium sulphide. It produces its effects very surely and rapidly. Liebreich regards it as the best remedy known for the hypodermic treatment of syphilis by mercury, as it is but little liable to excite local troubles or salivation. Later (*Med. Times and Gazette*, July 7, 1883), we find that Prof. Zeissel, in Vienna, after trial of this remedy in fifteen cases of

syphilis, was well satisfied with the results. In three of these cases salivation was produced. Some pain followed its injection, which was not, however, so severe as that following the hypodermic use of mercuric chloride. Twenty injections was the maximum number required to disperse the manifestations, even in severe cases.

Dr. Schacht, of Berlin (*New Remedies*, Sept. 1883), writes at follows:

"Formamide is a colorless liquid, boiling at about 195° C., which can be distilled without decomposition only in vacuo. It is prepared by acting upon formate of ethyl by ammonia. When pure it is neutral, but easily becomes acid.

"If a *concentrated* solution of formamide be *boiled* with precipitated mercuric oxide, decomposition ensues, and metallic mercury is separated.

"On the other hand, if a *dilute* solution of formamide be *warmed* on the water-bath with precipitated mercuric oxide, a clear, colorless solution results, in which soda (hydrate of sodium) produces *no* precipitate. Sulphide of ammonium, however, precipitates the mercury as sulphide, both from the formamide of mercury and from mercuric chloride. Solution of albumen is precipitated by the latter salt, but *not* by the formamide.

"Formamide of mercury is prepared in the following manner: 10 to 13 grms. of freshly precipitated, completely washed, and still moist mercuric oxide are gently warmed with a little water in a porcelain capsule, with gradual addition of 10 grms. of formamide. As soon as solution has taken place, the resulting colorless liquid is filtered into a litre-flask, and the latter filled to the litre-mark with distilled water. Each cubic centimetre contains 0.01 grm. of mercury, which is the quantity representing *one* hypodermic dose. Formamide of mercury keeps well in brown-colored bottles, and should also be dispensed in these."

In a note from Vienna (MED. NEWS, October 13, 1883), it is stated that Prof. Neumann is now trying hydrargyrum formamidatum on a large scale as an anti-syphilitic. It is used hypodermically in doses of 1 cc. It acts with far greater efficacy upon the recent efflorescences than upon the later manifestations. Pain of great severity and active local inflammatory troubles have resulted in Neumann's cases.

The preparation which I exhibit, made by Merck, of Darmstadt, is a one per cent. aqueous solution, and the dose of it is from half to one ordinary hypodermic syringeful.

It has not been possible to obtain the drug in this city until the present time. I would be glad to place the specimen which is exhibited in the hands of any member of the Society who may desire to made a trial of it clinically.

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## NEW YORK COUNTY MEDICAL SOCIETY.

*Seventy-eighth Annual Meeting, with Election of Officers and Censors, October 22, 1883.*

THE PRESIDENT, DAVID WEBSTER, M.D., IN THE CHAIR.

IN consequence of the very large attendance expected, the meeting was held in the Hall of the Young Men's Christian Association, instead of the usual place, the lower lecture-room of the College of Physicians and Surgeons.

The minutes of the last meeting were read and approved, and the SECRETARY, DR. W. M. CARPENTER, then read the annual report of the Comitia Minora, the By-laws directing that, at the annual meeting, the Comitia should report such of its proceedings during the year as had not already been announced to the Society at large.

THE SECRETARY also read the names of

EIGHTY-ONE CANDIDATES FOR ADMISSION

to the Society who had presented satisfactory documents and testimonials, and whom the Comitia recommended for election.

It was moved and seconded that the recommendation of the Comitia be adopted and the new members duly elected.

DR. AUSTIN FLINT, JR., moved that the motion be laid on the table until after the election of officers. This was defeated, and the motion electing the new members was then put and carried.

Continuing with the report of the Comitia Minora, the Secretary announced that in accordance with the finding of the Committee on Ethics in the case of Dr. H. H. Kane, it recommended that the latter should be expelled from the Society, and the recommendation was then adopted by the unanimous vote of the Society.

DR. O. B. DOUGLAS, read the

ANNUAL REPORT OF THE TREASURER.

At the commencement of the last fiscal year the balance in the treasury was $243.93, and during the year he had received $956 from annual dues, $946 from the assessment authorized at the last annual meeting, $213 from initiation fees, and $55 from the sale of the *Transactions of the State Medical Society*, making in all the sum of $3660.

The principal items of expenditure had been: $1922.52 for legal fees, $502.61 for the Secretary's expenses, $359.90 for the expenses of the State Medical Society, and $200 paid to the Secretary and Treasurer for services rendered; and there was left in the treasury a balance of $235.43.

The report was pronounced correct by the Auditing Committee, consisting of Drs. H. P. Farnham and P. A. Morrow.

THE ANNUAL ELECTION OF OFFICERS

being now in order, the Chair appointed as tellers, Drs. H. G. Piffard, W. T. White, George F. Carey, E. F. Ward, and W. T. Alexander.

The name of Brevet-Lieutenant Colonel Bennett A. Clements, Surgeon, U. S. A., having been duly proposed for honorary membership, Dr. Carpenter moved that Dr. John Milhan, who had presented Dr. Clements' name, should cast an affirmative ballot for the Society, and the motion was unanimously carried.

DR. A. FLINT, JR., having secured the floor, remarked that, as the names of the unusually large number of eighty odd new members had just been announced, he would like to inquire whether these gentlemen were entitled to vote at this election.

THE CHAIR having replied in the affirmative, Dr. Flint moved that the names of those new members who had paid their initiation fees and annual dues, should be read by the Secretary, so as to save the trouble of challenging the new members at the time that they voted; but the motion failed to pass.

DR. OBENDORFER said that he rose to ask for information, and inquired if bribery were a sufficient ground for challenging a vote, for, if it was, he would give notice in advance that he would challenge the vote of every new member.

DR. PIFFARD claimed that the gentleman had used disorderly language, and that his words should be taken down by the Secretary; but Dr. Obendorfer, on rising to make an explanation, was declared out of order by the Chair. This ruling was received with much dissatisfaction throughout the hall, as there was

a general desire to hear on what grounds such a charge was made; and Dr. Leo protested that the rights of free speech had been interfered with.

DR. FLINT stated that, in the history of the Society, such a large number of new members had never been known to qualify on the night of an election.

The balloting was then proceeded with, and while it was in progress the reports of the various standing committees were made.

DR. C. S. WARD, Chairman of the

COMMITTEE ON ETHICS,

reported that but three cases had come before the committee during the year. Of these, one had been disposed of by arbitration, and the other two had been referred to the Comitia Minora.

DR. A. E. M. PURDY, Chairman of the

COMMITTEE ON PRIZE ESSAYS,

reported that but one essay had been received by them, the subject of which was "Tubercles of the Breast." The report gave an analysis of the essay, and stated that in the opinion of the committee it was not of sufficient merit to entitle it to receive the prize of the Society.

The report of the

BOARD OF CENSORS

was read by its Secretary, Dr. H. B. Conrad. It stated that the board had actively carried on the work of causing compliance with the medical law of 1880, and, in addition, had accomplished a much more important work in securing the withdrawal of its charter from the irregular institution known as the United States Medical College. It had been clearly proven that the law of 1848, under the provisions of which it claimed its right to exist as a professional school, never contemplated the establishment of medical colleges at all; and the Society had successfully carried its case in two courts, as well as before the Governor of the State.

It was true that an unworthy Legislature had passed a bill granting the institution a charter, but this had been promptly vetoed by the Governor. Consequently, the place was now closed, and could no longer go on issuing diplomas. The history of this case had distinctly demonstrated that in the State of New York medical colleges did not come under the head of benevolent and charitable institutions. In conclusion, the Board recommended that the law should be amended in such a way as to provide that all those who presented diplomas from institutions out of the State should be required to pass a medical examination before being permitted to practice, instead of merely having their diplomas endorsed by a medical college, as was now the rule.

To the report of the Board of Censors was appended that of the legal counsel of the Society, Edward C. Ripley, Esq. It included the narration of prosecutions and legal opinions given in thirteen unfinished and twenty-two new cases. Most of the prosecutions were conducted in the Court of Special Sessions, and the report stated that in no class of criminal cases was so large a proportion of convictions secured as in those brought by the Censors of this Society. A disgraceful state of affairs was shown to exist in the New York Eclectic Medical College, which, during the year, had actually endorsed the diplomas or licenses of five men while they were under prosecution by the Society; which granted them the right to register at the county clerk's office, and thus become legal practitioners of medicine.

DR. S. O. VANDER POEL, Chairman of the

COMMITTEE ON HYGIENE,

begged leave to report progress, and stated that the full report of the Committee would be submitted at the adjourned annual meeting.

The following

AMENDMENTS TO THE BY-LAWS

which were recommended by the Comitia Minora as desirable for carrying on the practical work of the Society, were then unanimously adopted.

Article I., Chapter XII., shall be amended as follows: "When any physician or surgeon applies for admission into this Society, he or she shall place his or her medical diploma, with the blanks herewith appended, properly filled out and signed, in the hands of the Secretary, who shall lay them before the *Comitia Minora*, whose duty it shall be to examine the same, and, if it approve thereof, shall grant him or her a certificate of membership, subject to the approval of the Society.

Chapter XVII. shall read as follows: "No member of this Society shall assume any sectarian designation indicating that his practice is based on any special doctrine or dogma, or specified method of treatment."

Chaper XVII. shall become Chapter XVIII.

APPROPRIATION TO THE COMITIA MINORA.

The treasurer having stated that during the ensuing year the Society would require not less than $3000, and probably more than that amount, Dr. Sturgis moved that $3500 be appropriated for the Comitia Minora in carrying on the work of the Society during the year. Carried.

The Secretary stated that the Comitia Minora had recommended

AN ASSESSMENT OF TWO DOLLARS

from each member in addition to the annual dues of one dollar, as in the last three years, and moved that the recommendation be adopted. Carried.

The Secretary then read the following

COMMUNICATION FROM THE WESTCHESTER MEDICAL SOCIETY:

*To the Secretary of the Medical Society of the County of New York:*

At the annual meeting of the Medical Society of the County of Westchester, in June last, the Board of Censors presented the following resolutions, which were adopted:

*Resolved*, That the Representatives of this county in the State Legislature, be requested to urge the passage of *an act to prohibit all medical colleges from granting diplomas*, and requiring all candidates for the degree of Doctor of Medicine to appear before a State Board of Medical Examiners, who shall recommend successful candidates to the Regents of the State University for a diploma.

*Resolved*, That the Secretary send a copy of this resolution to the members of the State Legislature from this county, and to every County Medical Society in the State, and urge them to take the same action.

We think this resolution expresses the universal sentiment of a profession crowded with those who have virtually bought their diplomas. Let us earnestly cooperate to obtain the desired legislation. Please inform me of the action of your Society.

N. F. CURTIS, Secretary.

On motion the communication was referred to the Comitia Minora.

SCARLET FEVER IN HORSES.

DR. JOHN C. PETERS, Chairman of a Committee appointed in April last to investigate the subject of scarlet fever in horses, made a verbal report, in which he stated that although the Committee had had but little time as yet to attend to their work, he was firmly con-

vinced that there was no doubt at all that scarlet fever did exist among horses, that it had so existed from time immemorial, and that it was at present in existence in the city of New York. After alluding to the labors of Dr. Stickler on this subject, he remarked that the diagnosis of the affection was often extremely difficult, and that many veterinary surgeons were not as yet willing to acknwledge that it could exist among horses. Among these was Dr. Liautard, who was a member of this committee. As a rule, however, all the best veterinary authorities granted the existence of the disease; and Dr. Peters quoted from a large standard work by Robertson. In modern times, Dr. Percival, a noted veterinary authority, had been the first to call attention to this subject, in the year 1834, and Dr. Copeland, the author of the great medical dictionary, had taken it up with even greater enthusiasm. He stated that scarlatina was a modern disease, which had originated among horses, and which by them had been communicated to men. As a fact, the first record of the disease in the horse was found in the year 1514; while the first record of it in man was not until 1610. This was fully substantiated.

The question naturally arose, Why there were so few cases of the disease? The explanation probably was that, in all large stables, the green horses were put in quarantine for a time after their arrival, as they invariably suffered from distemper caused by their first exposure to the bad air charged with ammoniacal exhalations. While thus suffering, they were also, no doubt, attacked with scarlet fever, but the latter was masked by the more marked symptoms of the other affection. Few cases were noted consequently, because all the other horses had had the disease in their youth. Dr. Peters was of the opinion that the grooms could carry the disease from the stables into their own homes, and, *vice versa*, convey the scarlet fever poison from their homes to the stables.

The next point to determine was, Could the virus from the horse suffering from scarlet fever be used to protect the human subject from the disease? For some time past Dr. Stickler had been engaged in investigating this subject by experimenting with young colts selected with great care, and Dr. Peters said he believed that he was on the eve of establishing this important point. He hoped, therefore, before he died to see inoculation for protection against scarlatina as common as vaccination now was. In conclusion, he trusted that the Society would continue to give the subject some attention, and, as Dr. Stickler would have to encounter much indifference and opposition, that it would endeavor to hold up his hands in prosecuting this good work.

DR. PETERS then spoke of the sanitary condition of the stables of the city, in which were kept one hundred thousand horses. The condition was very bad, he said, in most of the large stables; but he was happy to say that the stables of the Fourth Avenue car line, in which were kept twelve hundred horses, were now a model of cleanliness and salubrity. They presented a marked contrast to what they had been formerly under another superintendent. He concluded his remarks by saying that he trusted that the board of health would soon treat patients suffering from scarlet fever, diphtheria, measles, and typhoid fever in the same way as those affected with smallpox and typhus fever. This would, of course, require an increased appropriation and a larger force of sanitary inspectors, but he believed that if it did not actually stamp out those diseases in the city, it would, at all events, have the effect of greatly diminishing them.

There being now no other business upon the meeting, DR. STURGIS requested that Dr. Obendorfer should be permitted to make

AN EXPLANATION

of what he meant in charging a member or members of the Society with bribing.

DR. OBENDORFER then receiving the permission of the Chair, stated that his object was not to impeach any of the new members, and if he had been thus understood he wished to heartily apologize. The point which he desired to state, however, and which he would have done before if the opportunity had been allowed him, was that positive proofs were in his possession that a member of the Society of long standing had attempted to bribe a member of the profession who did not belong to the Society, but was eligible to membership, to join it and vote a certain ticket in the election to-night. He would mention no names, but was fully prepared to substantiate this statement to the committee before whom the matter would properly come.

DR. STURGIS remarked that this was a serious charge and moved that it should be referred to the Comitia Minora with full power to investigate.

THE SECRETARY moved that when the Society adjourned it should be to meet at the College of Physicians and Surgeons, on the fourth Monday of November at 8 P.M. Carried.

On motion, the Society then took a recess until the tellers had finished counting the votes. The voting had occupied more than an hour and a half, and the polls were closed at twenty-five minutes to eleven.

THE RESULT OF THE ELECTION

was not announced until a quarter past twelve.

*President.*

| | | | |
|---|---|---|---|
| S. Oakley Vander Poel, | 375 | T. Gaillard Thomas, . . | 220 |

*Vice-President.*

| | | | |
|---|---|---|---|
| Andrew H. Smith, . . | 380 | Charles A. Leale, . . . | 215 |

*Secretary.*

| | | | |
|---|---|---|---|
| Wesley M. Carpenter, . | 385 | E. A. Judson, . . . . | 210 |

*Assistant Secretary.*

| | | | |
|---|---|---|---|
| Charles H. Amy, . . . | 380 | P. Brynberg Porter, . . | 215 |

*Treasurer.*

| | | | |
|---|---|---|---|
| Orlando B. Douglas, . | 384 | Henry D. Nicoll, . . . | 208 |

*Censors.*

| | | | |
|---|---|---|---|
| F. R. Sturgis, . . . . | 385 | Charles McBurney, . . | 210 |
| David Webster, . . . | 383 | Richard H. Derby, . . | 208 |
| Daniel Lewis, . . . . | 377 | Charles S. Wood, . . . | 210 |
| F. R. S. Drake, . . . | 373 | Charles Hitchcock, . . | 213 |
| Joseph W. Howe, . . | 378 | Thomas H. Burchard, . | 215 |

599 ballots were cast in all, but there were some blanks.

The result was the election of the New Code ticket headed by Dr. S. Oakley Vander Poel.

## NEWS ITEMS.

### PORTLAND, MAINE.

(*From our Special Correspondent.*)

LITHOLAPAXY.—The information recently stated in THE NEWS relative to the progress of litholapaxy by Bigelow's method, suggests that the apparent infrequency of that operation in this country, as shown by statistics therein quoted, is due to the neglect of operators to report their cases.

The number of operations of this nature performed in Maine thus far is small, but may be of some slight statistical value. Professor Bigelow's method was early adopted by the late Wm. Warren Greene, who reported a series of ten cases in the *Boston Medical and Surgical Journal*. One of these cases should be more

properly classed as "an attempt to operate," the condition of the patient not warranting a completion of the operation; the other nine were successful. To this report may be added thirteen other cases, all but two successful, reported locally or not at all by other Maine surgeons.

Doubtless our surgeons who have cases affording valuable information have little or no time to write out reports, but it is certain that the profession in Maine are losers thereby, both in information and reputation.

TAIT'S OPERATION FOR REMOVAL OF OVARIES AND TUBES has been successfully performed in this city four times, but no public record of these cases has ever been made.

THE MAINE GENERAL HOSPITAL.—At the annual meeting of the Corporators, held October 9th, plans and estimates were presented with the report of the Superintendent, providing for certain changes in the arrangement of existing rooms, thereby securing new quarters for servants, an amphitheatre, and an increase in the accommodations for patients of sixteen additional beds. These changes are made necessary by increased demands upon the resources of the hospital, at times beyond its ability to meet from lack of room.

The continued prosperity of this institution is most gratifying to its friends and patrons, and its permanent hold upon the interest and good will of the public and profession of this State is now well assured; it is hoped that arrangements may be perfected which will insure the beginning of these much needed additions early next Spring.

THE MEDICAL SCHOOL OF MAINE.—Before long, it is probable that efforts will be made to secure the removal of the Medical School of Maine from Brunswick to this city.

Clinical advantages are now available which ought to be utilized for the benefit of a greater number of students than now enjoy them. This will be accomplished by the proposed amphitheatre at the hospital and a possible out-service, which advantages cannot fail to aid the school in maintaining its deservedly high reputation.

A REGISTRATION LAW AND STATE BOARD OF HEALTH.—Thus far all efforts of the State Medical Association to secure the enactment by the Legislature of a Registration Law and the organization of a State *Board of Health* have failed. A determined attempt was made last winter to secure the former by one of our County Societies, but with no other result than the creation of a favorable public sentiment.

The desired end was nearly secured, the bill having passed a second reading, but "politics" and quackery killed it. Committees were again appointed at the last meeting of the State Association, to labor with the next Legislature to secure these measures of public benefit: they will very likely be delayed, but sooner or later we will have them.

DR. ALEXANDER RAMSAY.—The name of Dr. Alexander Ramsay may be within the recollection of some of your older readers. The *Transactions of the Maine Medical Association*, for 1883, now in press, will contain a biographical sketch of this talented and eccentric man. Visiting this country early in the present century, he lectured in New York and other cities north and south, and in many New England villages; striving to found in the backwoods of Maine "an institute of practical anatomy" to "corroborate faith by facts."

He was at one time an assistant of Dr. Nathan Smith at Dartmouth.

His work on the Anatomy of the Heart and Brain is now a rare book: he not only prepared his own drawings, but engraved the plates with his own hand.

Having been a pupil in London of the Hunterian School, and with the Munroes at Edinburgh, he placed no mean estimate on his own ability; remarking on one occasion that he "recognized only two superiors as an anatomist, GOD ALMIGHTY and JOHN HUNTER."

The record of his observations on the New York yellow fever epidemic of 1803 was published in the *Edinburgh Medical Journal* in 1812.

His therapeutical ideas were far in advance of his time: he never bled, and railed savagely at the prevailing methods of treatment in fevers.

Among his rules for "decorum" in his New York school in 1807 are these:

"Students to remain uncovered in the presence of the teachers. No conversation in the lecture- or dissecting-rooms or museum.

"No tobacco used in any manner in the school. No nauseous appearance of saliva on the floor."

The latter might well claim a modern application in some of our larger schools.

As an anatomist and instructor, he was renowned among the leading men of Europe, combining wonderful talents of eloquence and education with a terrific temper and the most insufferable egotism. His name appears in Knapp's *American Biography;* his death took place in this State in 1824.

The material for the sketch mentioned was gleaned from his collection of papers, books, and specimens formerly in the possession of one of his pupils, recently deceased.

It will be an interesting contribution to medical biography.

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YELLOW FEVER AT BREWTON, ALABAMA.—Acting Assistant Surgeon Stone, who was sent to Brewton by Surgeon-General Hamilton, of the Marine-Hospital Service, to make an investigation of the epidemic at that place, in conjunction with a physician from New Orleans, has reported that the disease is yellow fever. Up to the 19th inst., there had been thirty-four cases and eighteen deaths. This is a very high rate of mortality. The population of the town is between 300 and 500, but the disease has not spread to any extent. The adjoining towns have quarantined against Brewton. Three new cases and one death have since been reported.

THE CAPE CHARLES QUARANTINE STATION, established by the Marine Hospital Service, at the mouth of Chesapeake Bay, was closed for the season on the 15th inst. The location of this station is an excellent one, and should Congress deem it advisable to erect permanent quarantine buildings upon Fisherman's Island, the protection from contagious disease of the cities bordering on the bay would be much simplified.

YELLOW FEVER QUARANTINE AT PENSACOLA.—The cordon sanitaire established around the naval reservation near Pensacola, Fla., was ordered to be discontinued on the 25th inst., no yellow fever having developed inside the cordon since the 7th inst., and the last case being convalescent on the 11th.

YELLOW FEVER.—Sanitary Inspector Daniel M. Burgess reports that there were nineteen deaths from yellow fever at Havana for the week ending October 13, and that he had inspected and fumigated twelve vessels bound to United States ports, as follows: Oct. 7—Am. schr. "A. Kingsland," for Key West; Am. bk. "Havana," for New York; Spanish bk. "Sevilla," for New Orleans. Oct. 8—Am. schr. "Nonpareil," for Key West. Oct. 10—Brit. str. "Celtic Monarch," for

New York; Am. schr. "City of Havana," for Key West; Am. ship "Relief," for Key West. Oct. 11—Am. str. "Santiago," for New York; Am. schr. "Dauntless," for Key West. October 12—Spanish bg. "Lola," for Charleston. Oct. 13—Brit. str. "British Empire," for New York; Am. schr. "In Time," for Key West.

Sanitary Inspector R. J. Mainegra reports that there have been eleven deaths from yellow fever in the hospital at Vera Cruz during the week ending October 4th and that he has inspected the following named vessels bound to United States ports: Oct. 2—Schr. "H. Budding," for Pascagoula; schr. "Marian H. Rand," for Galveston; str. "West Indian," for New Orleans; str. "British Empire," for New York. He also states that there has been no yellow fever among the shipping at Vera Cruz for the past month.

THE CHOLERA.—The Consul General at Shanghai, in a report to the State Department, dated September 11, says: Sporadic cases of cholera still continue to occur in Shanghai, but in diminishing numbers. Among foreigners, five deaths from cholera were registered during August, as against ten in July. None have as yet been registered during September. One hundred and twenty were registered among the natives as due to "Tah Shah" in August, and one hundred and twenty-seven in July. The numbers continue to diminish.

The United States Consul at Malta reports to the State Department, under date of September 29, that certain changes have been made in the length of quarantine, imposed by the government, of vessels coming from quarantined ports (other than Egyptian) in which no cholera or other infectious disease exists, as follows:

| FROM: | Allowance for Voyage. | Quarantine imposed at Foreign Ports. | Quarantine at Malta, after Disinfection of Vessel. |
|---|---|---|---|
| French ports in Mediterranean, | | 14 days, incl. voyage. | 7 days, less actual duration of voyage to Malta. |
| Italian ports in Mediterranean, | | 15 " " | 6 " " " " " " |
| Austro-Hungarian ports, | 5 days. | 10 " | 6 " " " " " " |
| Turkish ports in Levant and Black Sea, *via* Smyrna, | 2 " | 10 " | 9 " " " " " " |
| Other ports in Black Sea, | | | 9 " " " " " " |
| Syrian ports, | 1½ days. | 10 days. | 10 " " " " " " |
| Barbary ports, *via* Beyrout, | 4 " | 10 " | 7 " " " " " " |
| Cyprus, | 1½ " | 10 " | 10 " " " " " " |
| Tunis, | 5 " | 7 " | 9 " " " " " " |
| Ports in Algeria, | 6 " | 10 " | 5 " " " " " " |
| Spanish ports, | 7 " | 10 " | 4 " " " " " " |

Arrivals from the ports of the Kingdom of Greece, on which twenty-one days quarantine is imposed on arrival from Egypt, will be admitted to free pratique. The "sfralto" against passengers from Egypt is maintained for the present. The quarantine against arrivals from Egypt is maintained at twenty-one days, to commence after the disinfection of the vessel at Malta.

CHOLERA IN EGYPT.—The Egyptian Minister of the Interior, a fortnight ago, officially published a statement, denying the existence of epidemic cholera in Egypt, and declaring it to be contrary to the opinion of all competent authorities.

Another announcement appearing in the same *Gazette* is a regrettable instance of stubbornness on the part of the Ministry, who must be presumed to be responsible. The Egyptian Star has been conferred on the members of the Board of Health whose failure and gross incompetency, universally admitted, render it almost an insult to the other wearers of the new decoration.

In the face of the above announcement, a cablegram of the 18th inst. announced that cholera had broken out in a village in the outskirts of Alexandria, which had heretofore escaped the infection. It is believed that the disease was caused by the infiltration into the canal running through the village of water from the adjacent cemetries, in which cholera victims have been interred.

YELLOW FEVER AT GUAYMAS.—The U. S. Consul at Guaymas, Mexico, in a letter to the State Department under date of October 4, 1883, states that, "While the symptoms are similar to yellow fever, the disease here in the majority of cases has shown that the patient dies either in delirium or a state of coma. That the vomit is alkaline and not acid, nor is it corruptive (destructive?) of textile fabrics, such as bedding, etc. That the urine flows from the body after death of a bright-yellow color; finally, that the vomit lasts from ten to twenty-six hours. These are the main points of difference as noted by the medical profession here and at Hermosillo, but the disease is equally fatal in severe cases as yellow fever. Had this been the genuine type of yellow fever, the deaths would have been quadrupled. Nevertheless, the Board of Health here have pronounced it yellow fever. I am happy to inform you that the disease here is diminishing, only seven deaths in the last three days. In Hermosillo the disease is not so fatal as it was in Guaymas, though there are many sick the ratio of death is less." The Consul adds that he hopes to obtain a complete list of deaths in a few days which he will forward to the Department.

YELLOW FEVER IN HAVANA.—There were eighteen deaths from yellow fever in Havana last week.

THE GERMAN SANITARY COMMISSION sent to Egypt some time ago to study the causes, etc., of cholera, having now exhausted their inquiries in that country, have received permission from the Imperial Government to extend their researches to India, the home and cradle of the terrible disease, and they will accordingly soon embark at Suez for Bombay. The Commission, it seems, discovered a new and peculiar micro-organism which may have something to do with the propagation of cholera, and the further studies of the *savants* in India will enable them to see whether their suppositions are correct.

YELLOW FEVER IN MEXICO.—Advices from Altata, Mexico, report that the population of that town has been decimated by yellow fever. The number of deaths for two weeks averaged twenty a day.

SMALLPOX IN NEW ORLEANS.—For the week ending October 13 there were three cases of death from smallpox in New Orleans.

TYPHOID FEVER IN QUEBEC.—In three days of the past week, thirty cases of typhoid fever have been received at the general hospital in Montreal, Quebec. Nearly all have been due to bad sanitary conditions in the patients' homes.

A GIFT TO A BOSTON HOSPITAL.—The wife of Lieutenant-Governor Oliver Ames has given $35,000 to the Free Hospital for Women, situated on Springfield Street, Boston.

SURGEON-GENERAL WALES' TERM.—The question as to when the term of office of the Surgeon-General P. S. Wales, as Chief of the Bureau of Medicine and Surgery will expire has been settled. Surgeon-General Wales was appointed August 16, 1879, but his commission was not issued until January 26, 1880. The appointment was for a term of four years. It has been decided by the Secretary of the Navy that Dr. Wales' term began with the date of his commission and that, therefore, he has still about three months to serve. A press despatch states that it is expected that Surgeon-General Wales will be reappointed, although Medical Director Gunnell is being strongly pushed for the office.

DR. J. C. HUTCHISON, of Brooklyn, who sustained an extra-capsular fracture of the femur, on the 31st of August, by being thrown from his carriage at Lake George, his many friends will be gratified to learn, is improving satisfactorily, and will probably recover the use of his limb without limp or deformity. This week, for the first time since his mishap, he has been able to walk about the grounds of his residence.

IMPORTANT DECISION OF THE SUPREME COURT ON IMITATIONS.—Last year, the Supreme Court of Rhode Island, by final decree, enjoined certain parties from offering for sale "Acid Phosphate," so called, in any package which shall be a substantial or colorable imitation of Horsford's Acid Phosphate. On September 24, 1883, the Court decided that William H. Hughes and Theodore S. Hughes had violated said injunction by selling the "Hughes' Acid Phosphate," so called, and that a writ of attachment must issue against them, whereupon they were fined $300 each.

THE NEW SCHOOL OF MEDICINE IN PARIS.—The new School of Medicine, which is being built in Paris, consists of two separate edifices, divided by the street called the École de Médecine, the first of which belonging to the Faculty of Medicine, is to be used for the general purposes of the Faculty, and includes the library, general offices, and museum of normal anatomy; while the second, belonging to the Practical School, will contain the laboratories of the professors and all the services relating to anatomy, such as the dissecting-room, lecture-room, collections, etc., as well as a museum of pathological anatomy. The Dupuytren Museum, which was placed in what was once the refectory of the monks, to whom the monastery, which had been converted into a school of medicine, belonged, is to be rearranged, and will have a façade upon the new street, when it is completed. The total length of the frontage of the new schools upon the principal street is upwards of 400 feet, and they will cost, when finished, about £280,000.—*Lancet*, September 29, 1883.

PROFESSOR CHEVREUL.—*L'Union Médicale*, writing of this distinguished *savant* on Sept. 4th, observes: "M. CHEVREUL, Member of the Académie des Sciences, and Director of the Muséum d'Histoire Naturelle, enters to-day on his ninety-eighth year. In spite of his great age, he assumes the modest title of *doyen des étudiants*, in which he glories; but we may term him far more justly the *doyen des maîtres*, for sixty years of the exceptional labors and services which he has rendered constitute one of the highest renowns of France. Born at Angers in 1786, he entered the École Centrale of that town in his seventeenth year, having Béclard as a fellow-student. In 1811, after some remarkable investigations, he was nominated *aide-naturaliste* at the Muséum, and in the course of some years he became Examiner at the Ecole Polytechnique, Professor of Mathematics at the Lycée Charlemagne, and the Director of the Dye Works and Professor of Chemistry at the Gobelins. In 1826, he succeeded M. Proust in the Section of Chemistry in the Académie des Sciences, and his great reputation became confirmed by his work on fatty bodies of animal origin. This important work procured for him the Argenteuil Prize of 12,000 fr. He then became the Director of the Muséum, in which post he has rendered great services; and in 1875 he received the Grand Cross of the Legion of Honor. One of the most active members of the Institute and of the Society of Agriculture, M. Chevreul still delivers his lectures at the Jardin des Plantes, and directs a portion of the works at the Gobelins."—*Med. Times and Gazette*, Sept. 22, 1883.

THE INTERNATIONAL SANITARY CONGRESS.—All the governments of Europe, with the exception of the French, which is waiting the completion of Dr. Fauvel's report on the recent epidemic, have accepted the invitation to take part in an International Sanitary Congress which is to meet in Rome next month. One of the objects of the Congress is to organize an international service in Egypt, with the view of protecting Europe against the intrusion of Asiatic cholera.

HEALTH IN MICHIGAN.—Reports to the State Board of Health, for the week ending October 13, 1883, indicate that erysipelas, typho-malarial fever, consumption, and pneumonia have increased, and that diphtheria and scarlet fever have decreased in area of prevalence.

Including reports by regular observers and others, diphtheria was reported present during the week ending October 13, and since, at seventeen places.

Seventeen cases of typhoid fever were reported in a school at Adrian, October 12.

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OFFICIAL LIST OF CHANGES IN THE STATIONS AND DUTIES OF OFFICERS SERVING IN THE MEDICAL DEPARTMENT, U. S. ARMY, FROM OCTOBER 15 TO OCTOBER 22, 1883.

BACHE, DALLAS, *Major and Surgeon.*—Assigned to duty at Willet's Point, New York.—*Par. 1, S. O. 238, A. G. O.*, October 18, 1883.

TAYLOR, MORSE K., *Major and Surgeon.*—Assigned to duty at Fort Sill, I. T.—*Par. 4, S. O. 210, Department of the Missouri*, October 13, 1883.

HEIZMANN, CHARLES L., *Captain and Assistant Surgeon.*—Granted leave of absence for six months, with permission to go beyond sea.—*Par. 3, S. O. 235, A. G. O.*, October 15, 1883.

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THE MEDICAL NEWS *will be pleased to receive early intelligence of local events of general medical interest, or of matters which it is desirable to bring to the notice of the profession.*

*Local papers containing reports or news items should be marked.*

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